APPENDIX C.

REPORTS OF THE SPECIAL COMMITTEES OF THE REPRESENTATIVE ASSEMBLY APPOINTED IN GOVERNMENT ORDER No. 15077-127—G. M. 626-17-1, DATED 9TH MAY 1918.

I.

Report of the Special Committee for making practical suggestions for increasing the earning power of people in villages.

Committee for making practical suggestions for increasing the earning power of people in villages:—
1. Mr. S. R. Balakrishna Rao (Convener.)
2. ,, S. Venkatesiah.
3. ,, Venkatasamiah.
4. ,, B. K. Garudachar.
5. ,, M. S. Krishna Rao.
6. ,, Anantha Setty.
7. ,, Girimaji Rao.
8. ,, Halappa.
9. ,, Chickaguruva Reddi.

We the members of the marginally noted Committee beg to submit our report on the matter referred to as follows:—The Committee met at Mysore on 3rd August 1918 in the Representative Home. The following members were present:—(1) Mr. S. R. Balakrishna Rao, (Convener), 2. Mr. Chinikatte Halappa, Chinikatte, Honnali Taluk, 3. Mr. S. Venkatesiah, Advocate, Hassan, 4. Mr. M. S. Krishna Rao, Advocate, Mysore, 5. Mr. Girimaji Rao, Kolar. Of the other members, Messrs. (1) Ananthasetty, (2) Venkatasamiah, (3) B. K. Garudachar expressed inability to attend—the first on account of ill-health, the second domestic inconvenience and the third gentlemen other engagements. Mr. Chickaguruva Reddy did not send any communication at all. Mr. M. N. Bâlaraj Urs, B.A., Secretary to the Industries and Commerce Committee, also attended the meeting and favoured us with valuable suggestions and information. He also read a note in Kannada on the general economic condition of the people in rural areas in Mysore, on their backwardness in Education, their utter indifference to any attempt at amelioration of their condition and want of enterprise. The Committee requested him to get the note printed and circulated amongst the rural population.

After some discussion, the Committees were able to make the following few suggestions for increasing the occpations and earning power of the people in villages:—

The bulk of the population is occupied in Agricultural persuits, only a small fraction being engaged to meet the commercial and, so to say, the industrial needs of the people. In the latter class may be included, the village trader, sahukar, blacksmith, carpenter, not to speak of any other *barabaluties*. Even these people resort to agriculture as their mainstay and ply their business as a subsidiary occupation. Thus by far the largest number of people depend on agriculture.

In the malnad, and in portions of the maidan, where there is no irrigation the agricultural season commences from about May and continues till the end of December. From January to April (inclusive), there is not strictly speaking any work in the fields, the raiyat being at times busy with harvesting only. Throughout the year no month can be characterised as taking up the whole time and energy of the raiyat. We are of opinion that the purely agricultural population can also afford to have subsidiary occupations and thereby increase their earning power. We do not believe the farmer and his people are employed throughout the year in the fields. We also believe that in some families—and they are considerable in number—men and women with special aptitude for small industries and crafts are also to be found. It is by giving employment to such people in particular and to others during their spare hours that they may be made to earn more than now. It has always been a problem as to how to best employ this time profitably to the people.

Before spinning mills were established, and even subsequently, in the cotton districts every cottage had a spindle or two (ಕೈರಾಟಿ.) and women of the household, when they had no employment in the field used to spin yarn, of course, of an inferior count. They were always employed to separate seed from cotton by a sort of crude gins. These processes are never intended to supplant machinery. All that is claimed for them is that they gave some occupations and some return to the family, which is now denied.

The same may be said of other things mentioned above.

We note below some of the cottage industries and other means of earning, which may be recommended for adoption after some more investigation and development:—

i. Weaving by adopting the fly-shuttle.
ii. Spinning.
iii. Mat-making.
iv. Knitting.
v. Sheep-rearing.
vi. Sheet-metal working, preparing household utensils.
vii. Preparing match sticks.
viii. Preparing match boxes.
ix. Preparing pencil sticks.
x. Coir, mats, ropes, etc.
xi. Button-making out of cocoanut shells.
xii. Silk-rearing.

The list is capable of improvement and enlargement.

In addition to the occupations and crafts suggested as above, we recommend the following measures to be taken by Government for arresting the further deterioration and decay of the villages both economically and socially :—

(1) Establishment of Banks to finance the agriculturists during their time of need on easy terms on the security of their expected crops.

(2) Creating agencies for marketing the agricultural produce to the best advantage of the producer and minimising the necessity of employing the middlemen.

(3) Institution of village panchayets and discouraging litigation.

(4) Opening of more agricultural schools in rural areas and establishment of demonstration farms.

(5) Spreading amongst the people, ideas of their depressed condition by constantly bringing to them the history of other agricultural people who have, by adopting the modern methods, improved their lot and learnt to live a robust and independent life and not looking up to Government for aid in time of distress.

The conditions of the country vary to such an enormous extent that what suits the villagers in Sagar as a subsidiary occupation will not be advantageous to his compeer in Mysore nor are the conditions, the same even in different portions of the malnad or maidan. Each locality has to be studied on the spot with special reference to the old industries, if any, that have decayed, to the habits of the people, to the requirements of the market, etc. This is a work that can be done only by a full time officer with thorough knowledge of the country, possessing an aptitude to sympathetically move with the people and capable of making practical suggestions suitable to each locality. With this view we recommend the appointment of a Development Commissioner for at least a period of one year. We regret we cannot do more than suggest as above noted and leave the work to be continued by such an officer.

S. R. BALAKRISHNA RAO,
Convener.

21st September 1918.

II.

Proceedings of the Meeting of the Committee constituted to consider the requirements of a model taluk, held at Bangalore on 15th September 1918.

PRESENT.

1. Mr. T. Narasinga Rao, Chikmagalur.
2. ,, C. Rasulkhan Sahib, do
3. ,, K. Ramanujaiengar, Gubbi.
4. ,, Hutchuveeregowda, do
5. ,, Karnik Krishnamurti Rao, Convener.

,, B. Gundu Rao of Devanhalli was also present.

1. Read the letters of Messrs. Shankara Narayana Rao of Shimoga and D. Nanje Gowda of Manjarabad, expressing their inability to attend the meeting.

2. The following reports and notes were then read, explained and discussed :—

(i) Report of the Select Committee of the Economic Conference on the subject.

(ii) Notes prepared in the Economic Conference Office and by the Secretary, Agricultural Committee, on the same subject.

(iii) Report of the Deputy Commissioner, Mysore District, on the question of making the Nanjangud Taluk a model one.

3. It was then resolved that the suggestions contained in the Report of the Select Committee of the Economic Conference are sufficiently comprehensive and that they should be adopted with the following additions and modifications:—

(1) There must be formed immediately, a model taluk in each district.

(2) The taluks should be selected by the District Boards and District Economic Committees concerned from among the most backward ones situated in the interior, without easy railway communication at present.

(Four were for and one was against this proposition.)

(3) In each taluk selected, there should at first be conducted an economic survey to ascertain its present position, in what direction improvements are necessary and in what stages, and at what rate, they can be effected. For this purpose a temporary establishment should be entertained.

(4) The improvement to be effected should begin in smallest and outermost villages and should gradually be introduced to all the central ones in due course,—sanitary improvements such as good drinking water supply, roads in, from and to villages, lights, drainage, removal of manure pits to a distance, and filling up of all pits in or near the village site, sweeping and conservancy, being attended to in the first instance and then medical aid education, etc., according to a fixed order.

(5) Arbitration Panchayets should be established at suitable centres for settling civil and criminal disputes, and Bench Magistrates' Courts should be constituted at the headquarters of the taluk.

(6) In each taluk a vigilance council should be constituted. It should consist of not less than 15 and not more than 30 members chosen by the elected members of the Taluk Board, Municipalities, Union Panchayets and recognised popular associations. Its members should have the right to inspect the taluk official records, excepting Police and incomplete Judicial ones, and it should be consulted by the Amildar in all matters relating to the administration of the taluk generally, and serve as a medium of communication between superior Government officers and the people in matters of general public interest. A definite proportion of the revenue derived in the taluk,—after reserving contributions for the Palace, Judicial, Police, Military, District and other general administrative purposes—should be reserved for expenditure within the taluk, and the Council should have complete control over the expenditure of the amount thus reserved within the taluk; and the advice of the majority of its members should be binding on the local officers. It should have the right to choose the taluk representatives on the District Boards, District Economic Committees, the Representative Assembly, and all other Divisional, District, or Provincial representative bodies.

7. With a view to infuse a spirit of healthy emulation and rivalry among the workers, and to enlist the willing sympathy and co-operation of the people, instead of the Deputy Amildar proposed to be appointed in para 4 of the Mysore Deputy Commissioner's Memo, the Deputy Commissioners may be authorised to select for definite periods, two official gentlemen living in the same or neighbouring Taluk to look after the development of the taluk, each of them to be given a decent monthly honorarium and having jurisdiction over a half of the taluk. The rest of the establishment may be suggested by the Select Committee.

8. No portion of the Government grant, or of other contributions, etc., made for the

purpose of improvements should be utilised for establishment and travelling allowance charges. The whole of it should be employed only on development works.

9. Such of the taluks elected whose Headquarters are within a radius of 30 miles from Bangalore, Mysore and the Gold Fields, should be provided with electric power for lighting and industrial purposes.

10. They should be connected with the District Headquarters by telegraph, telephone and Railway.

11. Lands owned by the same persons in different parts of the taluk should be formed into consolidated estates.

12. A Vidyasala or Dispensary should be established in each union and it sould have a midwife attached.

M. K. KRISHNAMURTY RAO,
Convener.

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III.

Report of the Select Committee to investigate and submit recommendations on Irrigation Developments in Mysore.

MEETINGS.

1. The Committee met at Bangalore on 30th June 1918 to settle the work and the scope of the Committee, on 21st July 1918 to make definite proposals and on 31st August 1918 to consider the final report to be submitted to Government.

MEMBERS.

1. Mr. B. Sreenivasa Iyengar, Anekal (Convener).
2. ,, C. Narasimhayya, Mysore.
3. ,, K. Venkataswamy Iyer, Nanjangud.
4. ,, Herur Gundappa, Kunigal Taluk.
5. ,, Krishnamurtyachar. Mulbagal.
6. ,, Linge Gowda, Landholder, Mysore Taluk.
7. ,, Siddalinga Setty, Yedatore.
8. ,, Doddasubba Reddy, Chintamani.

Mr. S. A. Ramaswamy Iyer, Executive Engineer, Irrigation Division (specially deputed officer), Mr. Aiyaswamy Iyer, Superintending Engineer, Northern Circle, attended all the meetings of the Committee. Mr. C. S. Kuppuswamiengar, Senior Assistant to the Revenue Commissioner and Mr. D. Srinivasa Rao, Assistant Superintendent of the Survey, attended the second meeting of the Committee on 21st July 1918 and helped the Committee with their practical suggestions.

Of the members, Mr. K. Venkataswamy Iyer did not attend the meeting held on 30th June 1918 and on 31st August 1918 on account of some other urgent engagement, and Mr. Doddasubba Reddy did not attend any of the meetings.

QUESTIONS REFERRED TO THE COMMITTEE.

The questions referred to the Committee are as follows :—

I. IRRIGATION DEVELOPMENTS.

(1) Construction or repair of tanks.
(2) Efficient maintenance of tanks and channels.
(3) Efficient and economic regulation of water-supply.

List of papers and statements enclosed as appendices to the report :—

(1) Rejoinder to the report of the previous committee by the Executive Engineer, Irrigation Division.
(2) Note by Mr. K. Venkataswamy Iyer.
(3) Note by Messrs. Linge Gowda and Siddalinga Setty.
(4) Statement of major tanks in Mysore, Kolar, Tumkur and Bangalore Districts, whose capacity is less than half of the Atchkat.
(5) D. O. No. 102, from the Senior Assistant to the Revenue Commissioner giving the details of progress in the minor tanks restoration scheme during the last four years.
(6) Letter No. 9064 from the Chief Engineer in Mysore, showing the number of restored and unrestored major tanks in the State.
(7) Copy of the draft irrigation cess fund budget for 1918-19, Bangalore District.
(8) Copy of the draft irrigation cess fund budget for 1918-19, Anekal Taluk.
(9) The previous Committee's report.
(10) Statement showing some particulars regarding irrigation in Bangalore District, sent to the Committee with Chief Secretary's letters Nos. G. 3525, dated 15th August 1918, and G. 4139, dated 26—27th August 1918.

II. INTRODUCTION.

3. Before going into details under respective heads noted above, some introductory remarks are necessary.

It is not the wish of the Committee to offer any criticisms for the sake of criticising. But unless defects, in the working of the present system, are pointed out, practical remedies

cannot be suggested. The defects are pointed as constructive criticisms and not as destructive. Therefore if the Committee report is too frank in some respects, they beg that it may not be construed otherwise, as no effective remedy can be suggested for a disease unless the cause of the same is correctly diagnosed.

4. Last year, another Select Committee was appointed in G. O. No. G. 122-71—G. M. 418-17-1, dated Camp Mysore, 4th November 1917, with Mr. C. Narasimhayya, Advocate, Mysore, as Convener. The Convener visited about 120 tanks in five districts personally at great personal inconvenience. The various defects in the present irrigation system were pointed out and remedies suggested in the exhaustive reports submitted by that Committee. The present committee wishes to emphasise the recommendations made by the previous Committee and further wishes to make the following few practical suggestions.

Importance of Irrigation Works and their Maintenance.

5. The G. O. No. R. 5251-61—Agri. 626-03-6, dated 15th December 1904, begins as follows:—

"Irrigation works occupy the very first position in point of importance as regards the well-being and prosperity of the mass of the people and in the Mysore State the subject of tank repairs is of such great moment to the interests of the people and the future prosperity of the country as to demand the earnest attention of the Government."

Again, in para 11 of the said G. O., it is stated "It was recognised that the attention of Government should be more particularly directed to efficient repair and maintenance of existing irrigation works rather than to the construction of new works.

6. *Economic Development and Irrigation.*—When the Government themselves acknowledge the supreme importance of irrigation, it is superflous for the Committee to dilate on the subject. The present Government are now doing their level best for the economic development of the country. The Mysore Province as a whole is mainly dependent on agriculture. To increase the income of the agriculturists, it is very necessary to grow commercial crops such as sugar-cane, etc., on a large scale for which water is very necessary. As such for the economic development of an agricultural country like ours, irrigation is of the first importance.

7. The question arises who is responsible for the present condition of irrigation works and channels and what is the remedy.

8. It is stated in the order of 1904 above quoted " * * * and that the raiyats being jointly interested with Government in the maintenance of these irrigation works, they should be made jointly responsible for their up-keep."

But the plea put forth by the officers is that they are overworked and are not able to pay attention to this work. The Revenue Department is responsible for the maintenance of irrigation works except river channels and few big tanks taken up by Public Works Department.

The Amildar has to halt outside his headquarters for not less than ten days in the month. When he halts in a village, it will not be very difficult for him to see the village tanks and sanitation.

9. In para VI of the order of 1904 Government have stated "Notwithstanding the efforts already made by Government for the proper preservation and restoration of the irrigation works, it is to be regretted that many tanks thus handed over to the raiyats for upkeep have been allowed to seriously deteriorate, owing chiefly to the failure of the Revenue Officers to enforce the maintenance rules of 1873." In 1918 we are where we were.

10. The Government may say that the people have neglected the tanks and the Government are not responsible for the neglect and so, no remission can be given and the full wet assessment should be paid to Government whether the raiyats get water or not. But in our State, instances are not wanting where technical portion of the work is neglected or delayed in execution for some or other causes. In such cases if the raiyat suffers in crop, he must be given remission. Further, in the rejoinder enclosed, it is referred to Kudimaramat system in Madras. But the rules in Madras and our rules are the same (*vide* paras 1, 2 and 5. Standing order, 86 pages 154-155, Vol. I of the Standing orders of the Board of Revenue Madras, and also pages 251 and 252, No. 2, Vol. II of the Mysore Blue Book Journal.)

11. Even in Bombay the same system exists. (*Vide* Sections 84 to 87, Bombay Irrigation Act of 1879.)

12. The late Chief Commissioner of Mysore has written as follows in his minute submitted to the Government of India:—"I should desire that it be clearly understood that the responsibility of the public officers, *viz.*, the Taluk officials and *mestris* under the orders of the District Engineer for the efficiency and safety of the tanks is to be in no way reduced and that it will still be their duty to see the necessary repairs executed; only the incidence of the charge of such repairs would be transferred from the Government to the raiyats who would contribute their labour and money. The wording of the Code is apt to produce the impression that the Patels are to do everything on their own authority and accord, that the Taluk mestris are simply to make one or two annual inspections and that the Amildars are

merely to visit with punishment, cases of neglect brought to their notice. I do not, however, contemplate any change of the present system of active supervision on the part of the Taluk officials, both in respect of inspection and actual execution of repairs to village tanks." (*Vide* page 590, New Revenue Manual.)

13. The raiyats are also to be blamed for the neglect. Some of the reasons for this state of affairs are:—

1. Want of co-operation between raiyats and officials and among raiyats themselves.
2. The existence of factions in villages.
3. The absenteeism of landowners.
4. The general growth of the individualistic spirit in villages.

In one word disintegration is going on. Everybody thinks of himself. Everybody's work is nobody's work. This is the state of affairs in the country. The raiyat thinks that his responsibility ceases when he pays his kandayam. The old village systems have disappeared and the individualistic spirit is the order of the day.

14. So the villagers have neglected not only their tanks which are very essential for their very existence, but also village sanitation, conservancy of gomal lands and such other communal works.

15. Even for the village improvement work so generously started by Government, the question of making half a day's labour compulsory had come up before the Assembly more than once.

16. Now the people are throwing the responsibility on the Government and the Government Officers are throwing the same on the raiyats. No use of criticising each other. As stated in Government Order of 1904 both are jointly interested in the maintenance of these irrigation works and are responsible for the present condition. The tenant has neglected his allotted portion of the work. If the proprietor also neglects, the property will deteriorate and the tenant will be responsible for only one year's assessment and the Government proprietor has to spend large sums to restore their property to the normal condition. The villagers are not educated to realise their responsibility and their old nature of implicit obedience has gone.

17. Further, our benign Ruler is the Sovereign proprietor of the soil (*vide* New Revenue Manual, page 539) and as such, all the irrigation works except those expressly stated as private, belong to Government. If the tanks belonged to ryots, the Government would have been entitled for only three-fourths of the wet assessment as in the case of Chowtayi tanks. The large number of raiyats have forgotten their duty and neglected the tank maintenance. If the Government also do not take up the matter in earnestness the large number of tanks for which Mysore is noted will be merely in name and gradually, Government revenue also will decrease. Till the spread of general education among the mass, and till the co-operative spirit is imbibed in the minds of people, the Government should strictly enforce the rules and see that the tanks are maintained in good order as it is their property. This has been clearly stated in the extract from the Chief Commissioner's note above quoted.

18. Many of the other defects have been pointed out in the exhaustive report of the previous committee. Either for restoration or maintenance, the systematic inspections of tanks is a duty of the first importance and if it is properly carried out and prompt action is taken on the inspections by the officers, a good deal of avoidable expenditure on account of cumulative neglect will be saved both to Government and to the raiyats.

III. Classification.

19. Classification of irrigation sources. The present classification is as follows:—

1. Rivers and river channels.
2. Tanks with minimum atchkat having assessment of Rs. 300 to be called Major.
3. Tanks with an atchkat having assessment of Rs. 300 and under, called Minor.

20. In some places tanks having a capacity of 10 units are classified as major on account of its atchkat, where, in other places a tank with a capacity of 30 units is classed as minor. The committee beg to propose that in classifying into major and minor, both atchkat and capacity may be taken into account, the minimum capacity for a major tank being 30 units or Rs. 200 atchkat.

21. Many of the minor tanks in the maidan districts have got long waste-weirs, long bunds, etc., and are not inferior to many major tanks. The cost of these weirs, etc., are heavier than those so-called major tanks in other parts. Therefore the committee beg to propose that the maximum for minor tanks may be reduced to Rs. 200. For malnad tanks separate provision may be made.

22. A tank which has got its bund and atchkat in two villages, is classified as minor if the atchkat in each village is that of a minor tank though the whole atchkat is that of a major. These are very common when a tank bund and atchkat belong partly to one taluk and partly to another, *e.g.* Gorghatta Upkarnahalli tank, Nelamangala and Dodballapur Taluks, Bangalore District, and also when a tank is situated partly in Mysore and partly in British Territory.

23. Further when calculating the assessment of the atchkat under a tank, the quit-rent

or jodi is often taken into account instead of the full assessment as is required by standing orders. This converts many major tanks into minor. These irregularities must be rectified.

IV. Revision of atchkats.

24. There are many tanks in the State with atchkat disproportionate to their capacity. In four districts alone (Bangalore, Kolar, Tumkur and Mysore), there are 488 major tanks whose capacity is less than half of the atchkat, out of a total number of 2,507 major tanks, in the whole State (*vide* Statement enclosed). This question has to be taken up seriously.

25. In this connection it may be stated that three factors have contributed to this state of affairs :—

(1) Gradual loss of capacity by the inevitable process of silting up of these tanks.

(2) Indiscriminate grant of *Nirsardi* at the first instance and converting them into permanent wet afterwards without comparing the capacity and the atchkat.

(3) The operations of the Survey Department who fix the atchkats of these tanks not with reference to the actual capacity of the tanks ascertainable from the Public Works Department Surveys but upon the actual state of cultivation rights at the time of the Survey. It was pointed out by Mr. D. Srinivasa Rao that the capacity of a tank is not the only criterion, as the tank may fill in twice or thrice and in some places one unit of water was required for one acre of paddy cultivation and in some other places half a unit was sufficient, that the rate near the sluice was heavier than that at the tail end, and that refixing of atchkats would interfere with private rights.

Recommendations.

26. Under the circumstances, the committee beg to make the following recommendations :—

(1) That all the tanks must be surveyed and their capacity at various levels must be estimated; that atchkat and area to be served by each sluice and distributions must be correctly marked in the village map, as suggested by the previous committee.

(2) That all tanks, whether big or small, which are in the series, should be invariably restored to avoid silt going into the important tanks below, though it may cost little heavy as it is necessary in the interest of important tanks below.

(3) The Tank Panchayets and Village Committees should be encouraged to grow trees, aloes, bamboos, etc., along the feeders and on the outskirts of tank beds to lessen the silt going into tanks and thus diminishing the capacity.

(5) A list of dry lands reserved for a special purpose but converted into wet under Nirsardi be prepared with the conditions attached to the grant of such lands and that all complaints about the supply of water to those lands be dealt with in the light of the special agreement entered into with the Government as suggested by the previous committee.

(5) In future, no application for converting dry land into wet under Nirasardi be granted unless the Public Works Department certify that sufficient water is available in the tank to irrigate the land without any complaint as suggested by the previous committee.

(6) Mr. D. Srinivasa Rao pointed out that during reclassification the wet lands for which water was not at all available was converted into dry, and also that under the tanks whose supply was precarious, if the raiyats applied for the conversion of their wet into dry at the time of reclassification, the same was complied with. The committee request the Government to make this known to all the raiyats by wide publicity immediately as the raiyats may be ignorant of the above and let go the opportunity of reclassification.

V. Construction.

27. The construction of new tanks.

The Committee wishes to leave this matter entirely in the hands of Government.

VI. Restoration—the present system.

28. Whether for a major or a minor tank, now, many complaints are mostly due to the projects being incomplete. Some of the instances have been quoted by the previous committee. It is due to raw and inexperienced men being put in charge of projects thinking that survey work is nothing when compared to construction. On the other hand one is as important as the other if not more. For instance, Doctors say that correct diagnosis of a disease is more than half cure. As such, if the project is complete in everything, the execution will be very easy and the worry of many supplementary estimates will be minimised.

Major Tanks.

29. The system of choosing major tanks for restoration is left to chance and not to any pre-arranged programme. It is "pick-and-choose" policy that is followed now. In this way,

many tanks are lost sight of and many tanks which are included in the budget are not taken up for execution for want of projects being ready. The works are not completed early. The progress is very slow.

30. There are 737 major tanks which are yet unrestored out of 2,507 major tanks in the State. Feeder channels are neglected and many of the tanks will not fill even once in a year. Sources of supply are as important as other works.

Minor Tanks.

31. Complete restoration of minor tanks scattered all over the country and necessary for the very existence of the population has to be undertaken "regardless of all mercantile calculations of profit and loss and percentages."

32. The recent rules enjoining the prepayment of one-third of estimates amount either in money or by labour, throw a heavy burden on the ryots of the maidan tanks. The long lengths of bunds that lead and the great cost of stones for revetment and very often costly weir works to these tanks lying in a series render the cost of restoration prohibitive, and the ryots most unable to bear such heavy burden. Unless this is lessened, there is very poor prospect of the rapid restoration of these minor tanks.

33. As the share of the ryots' contribution is arbitrarily fixed as one-third, the contribution is voluntary. On account of voluntary basis, many tanks which ought to be restored without any loss of time cannot be restored, as the ryots under such tanks will not come forward. At present the total amount of contribution has to be credited to the Treasury except in rare cases before the work is sanctioned.

34. There are about 18,490 minor tanks still to be restored in the whole State. The progress made for the last four years is as follows :—

	Number taken up	Number completed.
1914-15	692	161
1915-16	597	169
1916-17	637	95
1917-18	706	106
Total ...	2,632	Total ... 531

For the last two years the number completed have gone down, At this rate, it will take nearly 140 years to completely restore 18,490 tanks.

The agency is not adequate and the system of insisting upon the contribution being collected before the work is started, retards progress, If the restoration of 18,490 minor tanks to be finished say within thirty years, every year the restoration of 618 tanks has to be completed. That is not less than 1,500 tanks have to be taken up every year.

Recommendations.

35. Under the circumstances the Committee wishes to make the following few suggestions :—

1. Whether the tank is major or minor the project should be complete as recommended by the previous Committee.

In preparing the project the following points should invariably be considered :—

(a) increasing the capacity of the tank by raising the waste-weir.
(b) Feeder channels.
(c) Sluices leakage, level, site. gearing rods, locks and keys, convenience for the Nirganti to go to the sluice even when the tank is full; there should be no rear cistern to prevent the sluices being silted up.
(d) A separate waste-weir channel.
(e) Irrigation channels and their sluices.
(f) Bridges across waste-weir channels or carting manure, the crop, etc., and such other necessary things.

2. The recently sanctioned project sub-divisions should be in charge of an experienced Assistant Engineer and the Subordinates should not be raw hands but those that have had good experience of tank works. This is quite necessary and is supported by the Executive Engineer, Irrigation Division, also who states in his rejoinder that it is necessary that the highest technical talent available ought to be put on the preparation of projects.

3. An accurate and up-to-date list of both major and minor unrestored tanks should be prepared at once mentioning therein the atchkat and the capacity.

4. It is essential to prepare and maintain a list of all unrestored tanks in the district showing their present condition, urgency, approximate cost of restoration and as far as possible complete history by joint inspection of Revenue and Public Works Departments and people on the spot.

5. Definite programme for five years should be got up by the Public Works and Revenue Departments consulting also the wish of the raiyats. For this purpose the agencies of Taluk and District Boards may be utilised as Revenue and Public Works Department Officers and also non-official representatives of the raiyats are members in them.

6. As soon as the programme for five years is settled the project branch should take up projecting and have complete project ready for being sanctioned every year according to the programme.

7. Sanctioned projects should be placed before the District Board 3 or 4 months before the commencement of the next official year. The amount available for restoration work for next year should be intimated to the District Board before-hand. The District Board should make a selection among the sanctioned projects in the order of their urgency and according to the local needs, and should submit the same to Government for inclusion in the budget. As soon as the budget is sanctioned, the works should be commenced and completed early. The same applies to minor tanks also.

CONTRIBUTION.

8. (*a*) For major tanks, if the majority of the raiyats come forward and execute a mutchalika to give contribution, it should be collected from the defaulters as a revenue demand.

(*b*) With regard to unrestored minor tanks, the raiyats may either be made responsible for the amount required for earthwork and turfing or the proportion of raiyats' contribution may be reduced to one-fourth and made compulsory.

As soon as a project is sanctioned the raiyats' share should be intimated to the Revenue Authorities for collection. This demand should be added on to the khate of each raiyat and collected as a revenue demand. The work should never be delayed for the collection of the contribution but started as soon as it is sanctioned. The amount of Government grant and the raiyats' share should be adjusted afterwards in the Comptroller's office. The executing authority should have nothing to do with this account. It will not be a loss if few accountants are deputed for this work alone in the Comptroller's office. This will also apply to the contribution promised by the raiyats with regard to major tanks.

(*c*) With regard to the contribution that has to be recovered from the raiyats on account of cumulative neglect of the unrestored major tanks, the same procedure as stated above may be followed.

On no account should a work be stopped for non-collection of the contribution before hand, as those that have paid will have to suffer for the sake of some defaulters. The execution of the work and the collection of the contribution should go on like an automatic machine. Then alone, there will be any perceptible improvement in the state of affairs.

AGENCY.

9. The Revenue officers have to attend to multifarious business and as such cannot supervise the work very often when it is under execution. The Marahmat Engineer has no control over execution. Practically, the tank inspector will be the sole master. The Revenue Department knows the grievances of people as they are in close touch with the people. Therefore, the Deputy Commissioner should have a right to draw up the programme of works in consultation with the people and Public Works Department as stated *supra*. His proposals can be disregarded only for reasons to be recorded and communicated to him. The Public Works Department should be the technical agency to carry out the works. The collection of contribution should be done by the Revenue Department.

If the District Boards are given separate Engineering Establishment, the major tanks may be left to the Public Works Department proper, as hitherto and the minor tanks may be handed over to the District Board Engineer, the Deputy Commissioner alone being the Revenue Head over the District Board Engineer. The Revenue Sub-Division Officer and the Amildars should have nothing to do with the execution of the tank works except maintenance work that has to be done by customary labour. Even in the case of minor tanks, experienced men should be in charge of projecting. Or, if the District Boards are not given their own Engineering Establishment, the proposed District Board Engineering Establishment should be formed into separate Irrigation Divisions or Rangers for each district. The restoration work of both major and minor tanks should be transferred to these divisions or ranges and also the repair work of both major and minor tanks except the works that ought to be done by customary labour. The project sub-divisions should be attached to these irrigation divisions for preparing projects of both major and minor tanks. At present sub-overseers or overseers of the last grade, recently promoted from the sub-overseers' grade who were, are put in charge of sub-divisions. They cannot command the same regard as an officer does with his lower subordinates nor has he got the courage to represent to the Executive Engineer the practical difficulties experienced during execution. These sub-overseers and overseers in charge of sub-divisions cannot command the same regard as an officer does in their relationship with officers of other departments. Thus the progress of the

work is retarded and also the quality of the work turned out may not be up to the mark. Important works costing heavy outlay are put in charge of Lower Subordinates, *e. g.*, Nidasale project in Kunigal Taluk.

10. Tank bund margins must be reserved and never allowed to be encroached upon.

11. Tanks which cannot be restored on account of its prohibitive cost and so abandoned may be given over to the raiyats if applied for under chowtayi rules (*vide* para 48 of the previous committee's report).

12. *Restoration of Inam and private enterprise tanks.*—A talukwar list of all such unrestored tanks may be prepared and the rules may be enforced strictly.

13. The specific instances of drawbacks pointed out by the previous committee with regard to restoration may kindly be ordered to be attended to immediately.

VII. Maintenance and Water Distribution.

36. *Present state of affairs.*—At present these two matters are left to take care of themselves both by Government and the people. Rules are not wanting. They are not enforced and the people are not realising their responsibility on account of disintegrating spirit.

37. As early as 1873, rules were framed for maintenance. In 1878, the Chief Commissioner submitted a note to the Government of India dealing with irrigation works. In it he has dealt at length about the maintenance. Extracts are already quoted in the introduction *supra*. Again in 1904 the Government after considering the various recommendations of the committee specially constituted for the purpose passed the order No. R. 5251-61—Agri.626-03-6, dated 15th December 1904, modifying the tank maintenance rules. Extracts have already been quoted *supra* from the above G. O. regarding the necessity for efficient repair and maintenance, joint responsibility of Government and raiyats, and the failure of the Revenue Department to enforce the rules.

38. Even after the passing of the order of 1904, there is no improvement at all after a lapse of 14 years. Among raiyats want of solidarity and indifference to communal interests and among officers lack of supervision are at the bottom of this unsatisfactory state of affairs.

39. In this connection it will not be out of place if some extracts are quoted from the "Note on irrigation developments in Mysore" issued by Public Works Department in 1912.

"The most thorough going and systematic restoration of the tanks will be of very little use, unless we have organisation and arrangements for their repairs and maintenance. At present, there is no such organisation. The consequence has been that the majority of the tanks restored at such an enormous outlay, are lapsing into very bad condition and already there have been numerous instances of the necessity for the re-restoration of several works restored about 10 or 12 years back and Government have been put to the necessity of spending a great deal of money to make good the cumulative neglect of years whereas only one year's assessment can be recovered from raiyats."

Rules and orders are not wanting. But "None of the orders have so far tended towards the achievement of the objcet aimed at. The reason is there is no co-ordination between the departments and no system or organisation whereby, when a report of the necessity for maintenance is brought to notice either by the Public Works Department or by the Revenue Department, the case could be continuously pursued till practicle action is taken and the tank is properly repaired."

"The systematic inspection of tanks is a duty of the first importance and if it is properly carried out and prompt action is taken on the inspections, a good deal of avoidable expenditure on account of cumulative neglect will be saved both to Government and to the raiyat. At present large sums are spent on restoration and improvement and nothing on systematic repair and maintenance."

40. The raiyats have to do earthwork and turfing. For the other repairs, *viz.*, revetment sluice, waste-weir, etc., repair, the irrigation cess fund is used. The irrigation cess fund is another sort of contribution levied from raiyats for maintenance. The levy of irrigation cess is peculiar to Mysore. (*Vide* para 2 of the letter from the Officiating Commissioner, Nagar Division to the Officiating Secretary to the Chief Commissioner of Mysore, General Department, No. 632—Revenue 221, dated Shimoga, 10th March 1874, page 140, Mysore Revenue Manual of 1886.)

As such, the raiyats alone have to contribute either by money or by labour for the maintenance of work including revetment, weir sluice, etc., though in British India the raiyats have to do only the customary labour work, *viz.*, earthwork, turfing, jungle clearing, etc. Even the supervision which should be prompt and systematic in the interests of Government property (*i.e.*, tanks) and Government revenue is not properly done and the Government Officers are trying to shove this also on the shoulders of the people who are not united.

41. The defective working of the present system is largely due to the absence of a regular system of obtaining information regarding the condition of irrigation works from the villagers themselves. The other defects due to the neglect of officers and raiyats have been

pointed out in the introduction and in the report submitted by the previous committee at great length.

42. *Irrigation Cess Fund.*—As per rules prescribed in 1908, the budgets have to be prepared by the Taluk Boards and the District Boards in the form of a programme, and to be submitted to the Revenue Commissioner who, in consultation with the Chief Engineer, has to submit a consolidated budget for the whole State for sanction.

43. In 1914, the Government after considering the several recommendations of the committee specially constituted for the purpose were pleased to issue rules on the subject in accordance with the recommendation of the committee. Extracts from the rules are given below :—

1. *Rules.*—The district will be the unit for the Administration of the Irrigation Cess Fund.

2. Seventy-five per cent of the total amount collected each year in a district will be set apart exclusively for expenditure in that district.

3. The District Board should appropriate the district allotment as far as possible in proportion to the receipts under this head for each taluk, so that works in each taluk may receive their due share of funds and attention.

4. A triennial programme of urgent and important works in each taluk should be made by the Amildar in consultation with the Taluk Board and submitted to the Deputy Commissioner of the District who will approve of it in consultation with the Executive Engineer and the District Board.

How far these and other rules are given effect to in practice, may be seen from the copies of the draft budgets of the Bangalore District Board and the Anekal Taluk Board for 1918-19 herein enclosed.

44. Regarding water distribution, the less said the better. The defects are already pointed out in the report submitted by the previous committee.

Recommendations.

45. Under the circumstances the committee wish to make the following suggestions :—

(1) The irrigation sources may be divided into 4 classes.

(*a*) Rivers and river channels.

(*b*) Tanks serving several villages or having an atchkat of more than 300 acres called super major.

(*c*) Ordinary major tanks.

(*d*) Minor tanks.

(2) For the present, the maintenance of and distribution of water under river channels and super major tanks be left to the Irrigation Department, Advisory Boards being appointed as recommended by the previous committee.

(3) *Re-ordinary major and minor tanks,* every thing should emanate from the village itself.

Tank Panchayets or Committees are now formed under a voluntary basis. They should be made compulsory in the case of all tanks. This recommendation is supported by the Irrigation Executive Engineer (*vide* rejoinder).

Wherever there are Village Panchayets constituted under the New Local Boards Regulation, the functions of the Tank Panchayets should be transferred to the Village Panchayets. Where there are no Village Panchayets, the Village Committees may be given the power of management. There is no use of burdening the villages with several committees (*vide* para 42 of the report of the previous committee).

Where there are no committees or where it is not possible to form committees, the patels should be in charge of the tanks as hitherto.

As per recent rules regarding the election of Village Panchayets, the qualification does not include land assessment either wet or dry. As the tanks have to be given to these panchayets for management, the interests of holders of land under the tank should be safeguarded.

(4) The panchayetdars, committees or patel should maintain a tank register, and submit an annual report on the condition of each tank to the taluk. If the tank is in good condition, the report may be recorded. If any maintenance work has to be done by the raiyats, it should be got done immediately under the rules. For such work there is an order that Amildar should be given an imprest, but in practice no imprest is given. It is very necessary. If any repairs have to be done for other works, copy of the report should at once be sent to the department concerned, who should take prompt steps in the matter. No report should be filed till the repairs mentioned therein are executed.

(5) Though maintenance of a ledger in the Taluk office is prescribed in the Maintenance Rules of 1904 and the importance of the same is admitted in the G. O. No. R. 10842-52—L. R. 477-11-3, dated 26th May 1915, and its enclosures, it is not done so in all the taluks. Therefore it may be insisted that a ledger of all tanks in the taluk should be maintained in the Taluk office. There should be a tank register in each village. Reports

should be scrutinised in the Taluk office and action taken. These annual reports and action taken should be recorded every year in the tank ledger to be maintained in the taluk. An annual consolidated statement of reports received, action taken, inspections made, should be submitted to the district.

(6) The systematic inspection of irrigation works and channels is a duty of the first importance and if this is properly carried out and prompt action is taken on the inspections by the officers themselves, a good deal of avoidable expenditure on account of a cumulative neglect will be saved both to the Government and the people. Rules are not wanting for the purpose. They should be enforced.

As irrigation and sanitation are for the very existence of the people, it may be prescribed that the Amildars and their subordinates should invariably see to the irrigation works and sanitation.

The inspection reports made by the officers of both the Revenue and the Public Works Departments may not be vague but definite with regard to the condition of the irrigation works and repairs required to them.

(7) Taking all the circumstances into consideration, the committee has resolved that the raiyats who are now required to do the earthwork may be relieved of the burden of doing the earth turf work and the cost of such work may be distributed proportionately among all the wet, dry and garden landholders and mohatarfa payers. The annual collection so made may be kept in deposit in the name of the tank itself. The annual repairs may be estimated and the work undertaken by the villagers themselves or may be given away to Public Works Department, as recommended by the previous committee, *vide* para 15 of the previous committee's report.

(8) "It is only under the branch channels that there is good deal of trouble. All the lands under main and branch channels are assessed alike and here is no difference in the rates, if it is so, the committee sees no reason why the raiyats—owning lands under the branch channels should be taxed with the work of repairing branch channels. The branch channels also must be repaired by the Irrigation Department," as recommended by the previous committee, *vide* para 37 of the previous committee's report.

Administration of Irrigation Cess Fund.

(9) The orders of 1908 and 1914 should be enforced. The annual administration report of the Fund in each district should be placed before the District Boards for information, as to how far their recommendations have been carried out.

No regular account of Irrigation Cess Fund, income and expenditure in a district is maintained in the District Office nor in the Executive Engineer's Office, *vide* statements sent with Chief Secretary's letters Nos. G. 3525 and 4193, dated 15th August 1918, and 26—27th August 1918, respectively. District is the unit for the administration of this fund and the Deputy Commissioner is to submit draft budget in consultation with Public Works Department and District Board. Further, the irrigation cess fund is to be spent on ordinary maintenance works and the Deputy Commissioner is in charge of maintenance. Therefore the control and accounts may be with the Revenue Department. The amount of Irrigation Cess allotted to each taluk must always stand at the credit of that taluk.

10. In the ordinary maintenance, sources of supply should not be forgotten and neglected as is done now.

Distribution of water.

11. (*a*) Distribution under the river channels and the super major tanks may be done for the present by the Departmental agency, and distribution under other tanks may be entrusted to panchayets or committees or patels as the case may be. If both the systems work side by side, the latter will be educated in the economic use of water.

(*b*) Steps may be taken to minimise the waste at the tail end as far as possible.

(*c*) Provision should be made that the ryots at the tail end are well represented in the panchayet or committee.

(*d*) It should be insisted that all channels are cleared of silt and jungle to minimise waste of water.

(*e*) Channel offences should be strictly punished.

(*f*) The sluices may be provided with locks and keys.

(*g*) When the channels bifurcate, the level of the channels may be the same for some distance so as not to allow too much water to the lower channel.

(*h*) If possible, the main channel may be constructed with stone pipe, so that there may be least wastage, and avoid percolation. If this is done, the ryots cannot dig holes in the bed of the channel and take water to fill wells in their gardens by subterranean passage.

(*i*) The nirgantis should be trained.

VIII. Drainage.

46. A better system of sanitary drainage for the welfare of the ryot population is also a matter to which attention is very necessary. Good drainage is not only required in the interest of public health, but also for cultivation to reclaim marshy lands.

The problem of the health of the large agricultural population is of the utmost importance and any improvement in agricultural conditions and practices will not be of much consequence unless it is simultaneous with the well-being of the large class of ryots inhabiting the rural tracts. The problem in all the largely irrigated tracts is one of the most pressing importance and deserves considerations.

IX. Miscellaneous.

47. The convener of this committee requested the Chief Secretary in his letter dated 17th June 1918, to furnish him with certain informations for the use of the committee. The Chief Secretary was good enough to send statements of some of the available information with the letters No. G. 3525, dated 15th August 1918, and No. G. 4193, dated 26—27th August 1918, for which the committee are very thankful.

At the same time the committee beg to point out that all the information with regard to irrigation is not readily available for each district as it is seen from the statements sent to the committee and even with regard to Irrigation Cess Fund for which district is a unit.

Further figures in the statements regarding irrigation cess fund do not tally with the draft irrigation cess fund budget of the Bangalore District for 1918-19, *vide* copy enclosed.

Therefore the committee beg to suggest that a complete set of accounts regarding all irrigational improvements may be maintained taking a district as the unit as a study of the past figures is very necessary for all future development in the district.

X. Summary.

48. The Deputy Commissioner who is in close touch with the people should have the right of chalking out the programme according to the needs of the district in consultation of with the people and Public Works Department,—the District Board consisting of all these members being utilised for the same. As the officers of the Revenue Department have got multifarious duties, the technical department, *viz.*, Public Works Department, should have charge of all execution.

XI. Conclusion.

49. The committee beg to press once more that the defects and remedies suggested by the previous committee may be ordered to be attended to immediately, as also those suggested now in this report.

The subject is oue of the great importance and a very great one. Literature and rules are not wanting. The Chief Commissioner has written a very good note in 1878. Committees were formed several times, (*e. g.*, in 1904 and 1914) and again in the Dasara Session last year. Besides these, eminent Engineers have written valuable and practical suggestions. A Note on Irrigation Improvements in Mysore was prepared in Public Works Department in 1912 in which practical solutions were suggested. But no action was taken.

The tanks are scattered all over the country and are necessary for the very existence of the people. Mysore is noted for the largest number of tanks when compared to its area. Therefore their restoration and maintenance have to be undertaken "regardless of all mercantile calculations of profit and loss and percentages as the indirect benefits derived by the State from these works are incalculable." The wet and garden assessment realized is half the land revenue of the State. No amount of committees, pious reports, order and rules will improve matters, unless there is hearty co-operation on the part of officers and people, and the former are sympathetic and earnest. There should be practical action and everything should be systematic and no desultory and haphazard way of doing works will improve matters.

50. Once more, the committee wish to state that defects are pointed out as reasons for remedies suggested and never for the sake of criticising anybody.

51. It has been pointed out in the reports of the committees formed before and by eminent Engineers and the present committee wish to point out again, as it is very important, that one main defect in the whole system is that there is the absence of a regular systematic way of obtaining information regarding the condition of irrigation works. The defective working of the maintenance work is largely due to the above cause. This should be rectified immediately, as every other matter is to be based on correct information from the village itself.

52. The Convener Mr. B. Srinivasiengar is hereby authorized to forward this report with its enclosures to Government on behalf of the committee.

The members of the committee are thankful to Government for kindly deputing some of their officers to help and co-operate with the committee in their deliberations.

The members of the committee are also thankful to Government for furnishing several information wanted by the committee. Some other information wanted by the committee could not be furnished on account of short notice and other reasons.

The committee hope that urgent steps will be taken to carry out the suggestions made by the committee.

BANGALORE,
31st August 1918.

B. SRINIVASA IYENGAR,
Convener, and other members.

APPENDIX A TO THE ABOVE REPORT.

NOTE ON THE REPORT OF THE SELECT COMMITTEE OF THE REPRESENTATIVE ASSEMBLY, REGARDING CONTROL OF IRRIGATION, ETC.

General.—The subject under consideration is the managemant of tanks and channels, the existing conditions, present disabilities and remedies.

MAINTENANCE AND MANAGEMENT.

2. Under the standing orders, the responsibility of enforcing the rules is vested in the Revenue Department, and that of doing the work in the ryots. In practice, it is found impossible for any Government Department even to see that all our tanks are properly maintained. These tanks owe their existence to the enterprise of the people and it is to them that we must look to, if our tanks are to be satisfactorily maintained. The standing orders of the Board of Revenue, Madras, fixes the responsibility of the enforcement of tank maintenance on the Kudi Maramats or on the representatives of the peoples themselves. If they do it, so far so good; if not, well, it is not the look-out of the Government, but no reduction or abatement of assessment can be had on that score. The reference is merely to emphasise the fact that associating the people's representatives with the responsibility of enforcing maintenance, is the only practicable method. Enlightened representatives of the cultivators are now coming forward to assist and help in offering advice and suggestion. They would not be found wanting when appealed to for participation in practical work. In fact there is no better way, out of the difficulty.

WORKING SCHEME.

3. A practical scheme would be to have all the tanks in village, listed, to have each of these inspected once a year by a board consisting of the Chairman of the Village Panchayet and members if any or a few accredited representatives of the people, the village officers and the Tank Inspector or Manegar, to note down clearly all points requiring action in a register, which would maintain, a continuous record from year to year, and also the time, season, mode, etc., of such action or work. Once this is done, it ought to be the business of the Panchayet or Village Board to see that the items noted are attended to punctually and correctly. The benefit of inspection of the officers of the Revenue and Public Works Department can be had with advantage whenever possible or convenient, but it should not be a necessary condition for starting work.

TANK PROBLEM; PREPARATION OF PROJECTS.

4. A working scheme being thus outlined, the tank problem may now be considered in all the stages, *i.e.*, preparation of project, execution, maintenannce and control. There is a feeling now gaining ground among the people that in a matter so vitally affecting their interest, they are not being consulted and their suggestions taken. There is a sign that the outlook is brightening. The people are now awakening to their rights and responsibilities. Their aspiration is legitimate. From passive lookers on, they are now critics, but criticism implies study. We want their more active co-operation and their agency, to assume greater responsibility, later on. We want their advice and suggestion in the preparation of project. We want them to become our agents and contractors in the execution of works and active helpers in the control, regulation and maintenance. It is stated that our tank restoration scheme is not keeping pace with their deterioration. During the last half year (439) projects have been sanctioned and awaiting sanction; and there are 212 more in various stages of preparation. The charge is laid that when estimating, the Public Works Department do not provide for all the items. If when the surveyors go round, the leaders or representatives of the cultivators and the villagers would meet them and point out their requirements, it would be most welcome. It is necessary that the highest technical talent available ought to be put

on the preparation of projects. Recently, the formation of Project Sub-Divisions has been ordered. They will be in working order very soon and would ensure a steady flow of sufficient number of projects for sanction. Arrangements also exist for proper inspection on the spot and scrutiny of these projects by Executive Engineers and Superintending Engineers.

Execution.—So far, only one part of the difficulty is solved. With the increase in the number of sanctioned projects, the difficulty of finding the agency for execution would also increase. Of late, the tendency of the ryot is to shove even his obligatory work, on to the Government. The question is, where the labour is to come from. With the accuteness of the present labour conditions, imported labour is out of the question. The village or those in its vicinity have to supply the labour. If the Village Committee would undertake the execution of work, it will be the best arrangement possible.

Control and Regulation of Water.

6. We now come to the third and most complicated part, *i.e.*, the control and regulation of water. It is here that the sympathetic support and whole-hearted co-operation of the people is necessary. The work is delicate and at the same time very complicated and when entrusted to any official agency, the incidental troubles are many. It has been the aim of the Government to form these committees and train them in their duties and vest the control in them. To demonstrate methods of distribution and management, a few selected tanks have been taken up under the direct control of the Irrigation Department. The results so far, are by no means insignificant. The ryots in the vicinity have been able to appreciate the advantages, so much so that they are asking that their own tanks may be taken over and given the benefit of similar treatment. Kadaba tank in Tumkur is a case in point. Hoskote tank in Banglore, and Sulekere tank in Mysore, are similar examples. The *modus operandi* in the case of these tanks would be as follows:—The preliminary work is done. The tanks and the channels are placed in good order. Plans and statements of the Aatchkat and tank capacities are all prepared. General rules for the management and regulation are drawn up. Hand books are prepared embodying all the necessary information about the tanks, lands, etc. The cultivators are invited to form an Advisory Board. The tanks all being super major commanding a number of villages and involving a complexity of vested rights, no regulation Panchayet would answer. The ryots are also averse to such constitutions. Each village sends at least one representative to the Committee. When the number is too large there is a smaller managing committee. The duties of the village representatives, to start with to be to see that the conservancy staff distribute the water to the lands in their respective villages properly, to be the medium between the cultivator and the Committee to note the ryots' needs and difficulties and bring them to the notice of the Committee. Later on as they gain more experience and confidence in the work, they may be empowered to take cognizance of offences, violation of rules, etc., and report them. The committee would also advise about periods of closure, clearance work, programme, etc. Gradually the committee may take over all the powers one after another and eventually the complete control and release the Government agency for taking over other tanks for operation. These committees so far would only be examples. We want them by the hundreds to take over the management of our tanks. From them might grow a central Advisory Board for irrigation. They could also afford to have their own Consulting Engineers and working staff paid from their funds and under their sole control.

Compulsory formation of Committee.

7. The formation of these committees is now on a voluntary basis. The ryot thinks that serving on it is extra labour for which he has no recompense and therefore no incentive. Like the Local Boards, Municipalities and Unions it ought to be made compulsory. It is clear that the question of our tanks is so inexplicably involved with the information and proper working of these Local Boards or Committees. In solving it, many important problems connected with tanks would be incidentally solved.

8. The issues framed on the resolution of the Select Committee are placed befor the Assembly for discussion.

S. A. RAMASWAMY IYER,
Executive Engineer, Irrigation Division.

Printed note	Issues	Notes	Remarks
Page 12, para 35, clauses 1 and 2.	It is stated that the Revenue Department has a tendency to increase the atchkat without regard to capacity or supply.	Once the permissible atchkat is reached, further increase ought to be based on increase of capacity or improvement of duty. The Public Works Department may be consulted and their opinion taken before sanction.	
	What are the steps to be taken in increasing the atchkat under a tank?	Contribution *pro rata* or protection rate may be levied. Water may be given to such lands during monsoon or after water rises above a certain level, based on minimum supply, average supply and maximum supply. As the supply to a tank is fluctuating, the rules that govern ought to be elastic.	
Page 12, para 55, clauses 3, 4 and 5 to 9 and 10.	What are the measures necessary to conduce to the better management of tanks and their maintenance?	A properly constituted tank panchayet is the remedy *vide* note.	
Page 12, para 35, clause 11.	Grievances of the raiyats when brought to notice by a panchayet.	Will receive prompt attention.	
Page 8, para 6, clause.	How to prevent the silting up of feeder channels and the diversion of their waters to gardens and cocoanut plantations?	Periodical inspection and clearance. Villagers bringing to notice such defects would also help.	
		Water flowing in natural streams belongs to Government. Unauthorised *anes* across defined streams should be breached and their owners prosecuted. The cases of Saguvali kattes can't be helped.	
Page 8, para 7 ...	Abandoning breached tanks in series bring in a lot of silt into the tanks, in action, below.	The breached tank immediately above the one in action, may be restored to the extent necessary to serve as a silt trap, cost permitting.	
Page 9, paras 11 to 16 ...	*Vide* issue (2) *supra*,		
Page 9, para 17-20 ...	No general action called for *vide* note.		
Page 10, para 15 ...	Is the levy of irrigation cess on resettled lands legal?	*Vide* page 553, Revenue Manual.	
Page 11, para 28 ...	What are the measures required to counteract the wilful negligence and wanton mischief of the ryots?	Existing rules are defective. Prosecuting offenders under the Penal Code is almost impossible in practice. Punitive regulations are called for. For instance if a sluice or its gear is damaged, all the ryots receiving benefit therefrom ought to be held liable unless they could produce the offender.	
		This is the spirit of irrigation law. Irrigation Act when passed would improve matters.	
Page 13, para 37 ..	Should the branch channels be also repaired by the Government from irrigation cess?	The line has to be drawn somewhere up to the point where the channels branch off to serve each individual village; may be done by the Government.	
Page 13, paras 41-46 ...	Is it necessary to have a separate tank panchayet or would it be better to invest the powers on the Village Improvement Committee and have only one body for all the requirements of a village?	Opinion of the Representative Assembly is invited.	
Page 14, paras 47-48 ...	Is it necessary and desirable to class all minor tanks which cannot be restored as chowtaya tanks, remit assessment and ask the raiyats to restore them?	Do Do	
Page 14, para 49 ...	Is any change called for in the Minor Tank Restoration Scheme to ensure more effective supervision and more efficient working?	The subject is engaging attention. A scheme is under consideration.	
	Is it necessary to replace Tank Inspectors by Sub-Overseers?		
Page 14, para 50, control of water.	*Vide* note.		

APPENDIX B TO THE SAME.

A NOTE ON THE CONTROL OF IRRIGATION MANAGEMENT OF TANKS AND CHANNELS AND WORKING OF TANK PANCHAYETS.

Irrigation works consist of—(*a*) Wells, (*b*) Tanks and (*c*) Canals.

There is a huge network of tanks and large river systems of irrigation in the Province. In several districts, tanks still form the mainstay of the ryot for the storage of water for purposes of irrigation.

2. While irrigation works should be extended as far as practicable, there is a limit to them. There must be water before it is drawn off and the supply must not fail when it is most needed.

3. The restoration of tanks and the distribution of water under the river and tank systems have been the topic of discussion for several years past. It is unnecessary to refer at any length to the existing methods of distribution of water and to the manner in which the Government have been attempting to restore the tanks. Under the major systems, the control of all matters pertaining to irrigation is in the hands of the officers of the P. W. D. and every minute detail relating to the water-supply is settled by them, and a large staff of

subordinate officers has to deal with the wants of ryots in regard to the supply and distribution of water. The ultimate control under the tank system is with the Revenue Department, but the village community seems to have a voice in the distribution of water and the interference of the officials is not so minute as under river systems.

There is a considerable amount of dissatisfaction with the existing system of administration in matters pertaining to irrigation. The main cause of this discontent is due to the fact that Government has taken much into its own hands which had been managed by the ryot community themselves. The distribution of water on a co-operative system, the repair of the chief sources of irrigation of their lands either by contribution of labour or money were and are eminently makers for successful village management and it is impossible for any official agency to secure to the villagers that satisfaction which they must derive by a system of village autonomy.

An attempt is made by Government to revive the old order of things by the Tank Panchayet Regulation. The better name seems to be Irrigation Panchayet because the phrase "Tank Panchayet" creates a notion that they are intended for the management of tanks only. The rule that patel should be the Chairman of the Committee must be removed. The election of the Chairman may be left to the villagers. The Tank Panchayet may be made the authority to settle irrigation disputes.

Many matters requiring settlement are continuously cropping up between raiyats *inter-se* and between the raiyats and the officials of Government and there is now no recognised means of settling these in amicable manner except by a reference to the Law Courts. The present state of things involves the ryot either in a law suit with his neighbour or in a large number of ineffective revenue appeals. I think that an enactment on some such lines as those of Conciliation and Arbitration Boards Act in Great Britain for the prevention and settlement of trade disputes may be passed. Agriculture being the greatest industry of the State, similar action on the part of the Government to promote the welfare of raiyats, appear to be equally necessary here.

To manage irrigation properly, a fair knowledge of Engineering and Agricultural science is necessary and so Engineers who have had a course in agriculture will do well as Irrigation Engineers who will prevent water by being injudiciously used and dispel the errors which the ryots possess. They have got a tendency to take more water than is necessary which not only removes good out of the soil but renders the locality unhealthy. Drainage channels will be attended to. Hence, Revenue Officers and Engineers with agricultural training are likely to have mere sympathy for the ryots than mere Engineers. How many have been fruitlessly applying to D. P. W. for years for a sluice gate here, for a channel there, for permission to open a lock gate a little earlier or a little later than usual and so on. In certain localities, cultivators are accustomed to cut across bunds and roads admitting water into the fields for protection of their crops. Having an eye to the protection of crops, officers with rural training will be able to shape their annual programme in the interests of cultivators. Ordinary Engineers would look upon such questions from the road or bund point of view only.

The proper distribution of the canal or the reservoir water is very important. But it is a perplexing and important problem. Each ryot must receive water in a quantity proportioned to his interest in the canal and at such a more as will ensure him a good crop. The ryot knows only one test of the efficiency of canal management, does he have an ample supply of water whenever needed by his crops? The success of the irrigation enterprise depends upon the success with which this test is answered, *i.e.*, upon the system of distribution in the canal.

There are three general methods of distributing irrigation water (1) a continuous flow of water during the whole irrigation season, (2) an intermittent flow for a definite length of time at certain intervals, (3) the delivery of water to the ryot as he applies for it.

Under reservoirs, with an ample supply of stored water, any one of these three methods may be used. Where channels are taken directly from the rivers, the first two methods may be used, but the third method is practically impossible.

The method chosen for distribution may affect greatly the duty of water under the system, for it may determine the crops to be grown and the areas to be devoted to each.

The duty of water means the quantity of water to mature crops. It is expressed as the number of acres that may be irrigated by a definite quantity of water, say a second foot flowing continuously throughout the growing season.

The proper distribution of water from great canals can be accomplished only by an organisation for the purpose. The increasing value of water has made the proper distribution of water more and more important. Experience points to the conclusion that the success of an irrigation system is in direct proportion to the supervision given to the distribution of water and the maintenance of the system.

The head of the organisation for water distribution should be an Irrigation Engineer, one who understands enough of engineering to maintain on a high state of excellence, dams, canals, laterials and gates of the irrigation system and who understands enough of modern irrigation and agriculture to direct the use of the water for the production of crops under the

canal system. His subordinates should be experienced in practice of irrigation so that the farmers' side may be understood by them.

Hence the suggestions are :—

(1) Engineers with special training in agricultural science must form the Irrigation Department.

(2) The control of the sources of irrigation should be vested in the Irrigation Panchayet.

(3) A regulation should be passed, enabling the Government to constitute Arbitration Boards to prevent and settle irrigation disputes.

(4) A continuous and sustained policy is necessary for the restoration and maintenance of tanks.

(5) Attention should be paid to have sufficient drainage channels to correct the evils of irrigation.

K. VENKATASWAMI AIYAR.

THE IRRIGATION PANCHAYET.

The main purpose of an Irrigation Panchayet is to devise and introduce a system of village management suitable to existing conditions, to which all matters relating to irrigation may under appropriate safe guards, be entrusted.

The distribution of water on a co-operative system, the repair of the chief sources of irrigation, either by contribution of labour or money from all the irrigators, are matters for successful village management and it is impossible for any official agency to secure to the villagers that satisfaction which they must derive by a system of village autonomy.

The most common objection to a proposal for the constitution of a village authority and for securing a fair and equitable distribution of water is that the wealthy ryot will oppress his poorer neighbour and the more influential man will first appropriate the water to the detriment of the smaller peasant. I do not deny the possibility of something of the kind happening sometimes. But I believe things cannot be worse than under the present arrangement. The wealthy man who can get round the official subordinate has a free hand even now and can do what he likes. At any rate, the public opinion of the ryots will assert itself against improper practices by the panchayetdars. In several villages, irrigators still faithfully observe village customs creating ryots for an equitable distribution of water, and German methods are very rarely practised. On the whole I have no doubt that a Village Committee is certain to work well and is the only means for the removal of existing discontent and will free the ryots considerably from the tyranny of petty officials.

Many matters requiring settlement are continuously cropping between ryots *inter se* and between the ryots and the officials of Government and there is now no recognised means of settling these in an amicable manner except by a reference to Law Courts. The present state of things involves the ryot either in a law suit with his neighbour or an innumerable number of ineffective revenue appeals. The time is therefore come when the Government should seriously consider the desirability of enacting a Conciliation Act for the settlement of agricultural disputes of the ryots, similar to the Act of 1896 in Great Britain for the prevention of trade disputes under the latter Act. Voluntary Conciliation and Arbitration Boards for the settlement of disputes have been successfully working and the Board of Trade have some statutory functions under the Act for organizing these Boards wherever they are required. Agriculture is the greatest industry of our country and similar action on the part of the Government to promote the true welfare of the ryot is equally necessary here.

PUBLIC HEALTH AND IRRIGATION.

A better system of sanitary drainage to secure the health and convenience of ryots is also a matter to which urgent attention of Government is very necessary. The connection between public health and irrigation has formed a subject of frequent examination by sanitarians and while the material benefits of irrigation are undoubted, the comparative unhealthiness of the tract of country under wet cultivation does not admit of controversy. The problem of the health of the large agricultural population is therefore of utmost importance and any improvement in agricultural conditions and practices will not be of much consequence unless it is simultaneous with physical well-being of the large classes of the tillers of the soil inhabiting the rural tracts. The problem in all these irrigated tracts is one of the most pressing for solution and deserves very early attention.

If there be a likelihood of a return from irrigation considerably exceeding the interest on the money invested save part of the capital represented by the difference, may be invested in the general improvement of the condition and healthfulness of the country from which such revenue is derived. I believe that the surplus revenue of many of the irrigation systems over

the interest on the capital expenditure is several lakhs of rupees and are yielding very handsome returns to the State. Any special expenditure of the State Funds for the removal of serious sanitary evils is a legitimate charge on the revenue derived therefrom.

APPENDIX C TO THE SAME.

NOTE BY MR. LINGE GOWDA AND BALE SIDDALINGA SETTI (TRANSLATED).

1. After the Survey Department have fixed the extent of wet lands in consultation with the P. W. D. during the distribution of lands, the Revenue Department have brought under cultivation some more lands which are to be irrigated from the tanks and have levied the prescribed tax. Hence the difficulty of water-supply is felt keenly.

2. As regards the repairs of the Minor Tanks, the ryots not only do not keep them in good order but also do not make necessary repairs. Therefore it is required that contribution should be levied from the ryots and the repairs entrusted to the Tank Panchayets or Village Panchayets.

3. Every tank must have a Tank Panchayet.

4. The functions of a Tank Panchayet are as follows :—

It should levy a contribution of Re. 1 per acre once in three years and should utilise the amount realised for keeping the tank in good order, and it should hold itself responsible to supply in season, water for cultivation, to prevent any danger to the tank during repairs, to keep the accounts of the expenditure of the money contributed by the ryots every year and to deposit the balance.

5. Tanks yielding a sum of Rs. 100 should be considered as Minor Tanks and those above that amount as Major Tanks.

6. The Government should be considerate even while settling the extent of wet lands to be irrigated from Major and Minor tanks. As regards lands irrigated from river canals, the P. W. D. have specified the number of acres that can be irrigated by a certain depth of flow of water. But this arrangement has not been benefiting the ryots since depressed lands get more water than the lands on a level with canals. Therefore the request that the existing arrangements should be altered and properly set right.

7. The Mysore-Arsikere Railway passes through many wet lands and has obstructed the water-supply to the lands on the sides of the line. Therefore arrangements should kindly be made to convey water to the side lands by means of small canals running across the line.

LINGE GOWDA,
Mysore Taluk.

BALE SIDDALINGA SETTI,
Yedatore Taluk.

APPENDIX D TO THE SAME.

2. Abstract statement of major tanks whose capacity is less than half of the atchkat compiled from the detail statements furnished by the Executive Engineer.

IRRIGATION DIVISION.

Name of the District	Tank with atchkat less than 100 acres			Tanks with atchkat of and more than 100 and less than 250 acres			Tanks with atchkat of and more than 250 and less than 500 acres			Tanks with atchkat of 500 acres and above			Total			Remarks
	No. of tanks	Total atchkat		No. of tanks	Total atchkat		No. of tanks	Total atchkat		No. of tanks	Total atchkat		No. of tanks	Total atchkat		
Mysore ...	14	1095	16	12	1846	2	5	1737	17	6	6480	0	37	11158	35	
Kolar ...	119	8366	0	61	9480	0	13	4475	0	3	2094	0	196	24415	0	
Tumkur ...	30	2402	0	71	10591	0	13	4528	0	6	5550	0	120	23071	0	
Bangalore ...	69	5132	0	54	7711	0	11	4271	0	1	676	0	135	17790	0	
Total ...	232	16995	16	198	29628	2	42	15011	17	16	14800	0	488	76434	35	

B. SRINIVASIENGAR,
Convenor, R. A. Select Committee.

31st August 1918.

APPENDIX E TO THE THE SAME.

3. A Letter from the Assistant to the Revenue Commissioner.

D. O. No. 102.

Office of the Revenue Commissioner in Mysore.

Dated Bangalore, 26th July 1918.

Dear Sir,

In reply to your D. O. letter of the 24th instant, I have the honor to inform you that there is no list of restored minor tanks in this office and that there is only one copy of the list of unrestored minor tanks which is constantly required for reference here. The numbers of unrestored minor tanks in each district are noted in the margin. Information as to how many of them are unfit for restoration has been called for and replies from all the Deputy Commissioners have not been received. So the numbers now given can be taken only tentatively.

Bangalore	587
Kolar	2,037
Tumkur	356
Mysore	1,147
Hassan	4,859
Shimoga	6,797
Kadur	2,619
Chitaldrug	79

Information regarding the number of tanks taken up for restoration in each district and the amount spent is given below. Names of minor tanks taken up for restoration are not available in this office.

District	1914-15			1915-16			1916-17			1917-18		
	Number taken up	Number completed	Amount spent	Number taken up	Number completed	Amount spent	Number taken up	Number completed	Amount spent	Number taken up	Number completed	Amount spent
			Rs.			Rs.			Rs.			Rs.
Bangalore	139	8	27,430	146	46	13,604	139	28	19,287	80	2	6,320
Kolar	133	65	18,953	51	18	10,356	52	8	18,930	74	14	25,356
Tumkur	101	21	14,222	110	30	12,995	103	18	12,098	101	17	10,891
Mysore	37	6	3,022	32	5	2,471	48	2	3,037	62	7	15,971
Hassan	109	16	6,128	120	33	8,877	152	24	21,630	152	41	34,680
Shimoga	76	8	10,393	51	13	8,629	57	6	12,679	143	15	9,565
Kadur	35	2	2,410	39	6	4,313	64	0	7,948	75	6	26,225
Chitaldrug	62	35	6,409	48	21	7,569	22	14	3,120	19	4	6,798
Total ...	692	161	88,967	597	119	68,814	637	95	98,729	706	106	1,35,722

C. S. KUPPUSAMI IYENGAR,

APPENDIX F TO THE SAME.

4. A Letter from the Chief Engineer in Mysore.

No. 9064.

Mysore Public Works Department,
Central Office.

Dated Bangalore, 27th July 1918.

From

The Chief Engineer of Mysore, Bangalore.

To

B. SRINIVASAIENGAR, Esq.,
Convenor, R. A. Select Committee, for
Irrigation Developments, Anekal.

Sir,

With reference to your letter dated 6th instant, requesting to be furnished with a list of tanks whose atchkats are disproportionate as compared with their capacity, I have the honor

to inform you that the Executive Engineer, Irrigation Division, has reported that he has promised to furnish the list to you in person.

2. As regards copies of the inspection reports of major tanks referred to in your letter of the 24th instant, I have to state that, as such reports have been placed on the respective tank files, they cannot be readily traced without a laborious search. The tanks in each district are several in number. If, however, you will kindly specify the tanks for which the reports are required, an endeavour will be made to supply you with the information required.

3. I attach hereto a statement showing the number of major tanks, restored and unrestored, in each district, in compliance with your letter of the 26th instant. As the number of tanks is very large, it will not be possible to make out a detailed statement for some months.

I have the honour to be,
Sir,
Your most obedient servant,

N. P. SUBRAHMANYA IYER,
For Deputy Chief Engineer of Mysore.

Enclosures to Appendix F above.

(1) Statement showing the number of Major Tanks in the State,

District	Number of tanks		Total
	Restored	Unrestored	
Bangalore	285	50	335
Kolar	429	97	526
Tumkur	347	51	398
Chitaldrug	116	11	127
Mysore	145	52	197
Hassan	163	97	260
Shimoga	218	335	553
Kadur	67	44	111
Total ...	1,770	737	1,507

(2) Budget Estimate under "Irrigation Cess Fund," Bangalore District.

Receipts		Expenditure	
Taluk	Amount	Details	Amount
	Rs.		Rs.
Bangalore	4,145	Major Tanks—	
Hoskote	2,910	Fresh works	11,600*
Dodballapur	2,342	Incomplete	4,000
Nelamangala	2,330		
Kankanhalli	819	Minor Tanks—	
Magadi	1,878	Fresh works	.....
Channapatna (including Closepet)	3,449	Incomplete works	3,000
		Total ...	18,000
Anekal	7,431		
Devanhalli	2,150		
Charges for establishment to be contributed by Government.	3,240	Charges for establishment and tools and plant at 18 per cent.	3,240
Total ...	3,094		21,240

REMARKS

* Details (since furnished by Executive Engineer.)

	Rs.
Bangalore Taluk—	
Gunjur-Mavinkere	500
Karivobanhalli tank ...	400
Kannali tank	300
Bilakanahalli Lingammanakere.	300
Kothanur tank	500
Anekal Taluk—	
Repairing Madaboi's under Bidarkuppa tank.	200
Repairing Anikat under Bommasandra tank.	200
Kankanhalli Taluk—	
Chulukankere	50
Harohalli Hirekere	50
Thattigoppe Chikkalingasastrikere.	50
Channapatna Taluk—	
Repg. the 3 sluices of Rangnur tank.	800
Repg. sluices of Hodikehoshalli tank.	200
Repg. weir of Mallur Dodkere.	500
Resetting revetment of Akkur tank.	700
Repg. Ramannakere ...	500
,, Harur tank	500
,, Mallurapatna tank ...	200
,, Banpur tank ...	500
Devanhalli Taluk—	
Hondrahalli tank	50
Same Bande tank	200
Bettakote tank	300
Bannimangala tank ...	400
Dodsamekere	300
Dodballapur Taluk—	
Tippur Dodkere Kavghatta tank.	450
Sulya Mandigunda tank ...	350
Rajghatta tank	200
Madihalli tank	300
Henabe tank	300
Nelamangala Taluk—	
Dasanpur tank	500
Honnasandra	300
Soyappanahalli tank	300
Alur tank	200
Goranbele tank	150
Teluchigere tank	150
Magadi Taluk—	
Hulikal tank	200
Kodihalli tank	300
Total ...	11,008

(3) Irrigation Cess Budget Estimate for 1918-19, Anekal Taluk, Bangalore District.

Estimated for 1918-19	Sanctioned for 1917-18	Actuals for 1916-17	Expenditure	Amount	Remarks
Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.	
430 0 0	430 0 0	430 6 1	Repairs to madabois under the Biderguppe tank.	200 0 0	
			Repairs to anikat under the Bomsandra tank.	230 0 0	

"Copy"

G. SRINIVASA IYA,

For *Amildar.*

ANEKAL,

31st December 1917.

(4) Statement showing the particulars of major and minor tanks restored in 1915-16 and 1916-17 in the Bangalore District required for the Special committee on Irrigation Developments in Mysore.

Name of taluk and years	Number of major and minor tanks restored and unrestored				Wet assessment realised	Irrigation cess realised	Number of major tanks restored and the amount spent		Number of minor tanks restored and amount spent		Amount of irrigation cess spent on repairs of both major and minor tanks	Total amount of irrigation cess realised	Remarks
	Restored major tanks	Unrestored major tanks	Restored minor tanks	Unrestored minor tanks			Restored major tanks	Amount spent	Restored minor tanks	Amount spent			
					Rs. a. p.	Rs. a. p.				Rs. a. p.			
Hoskote—													
1915-16	34	18	20	50	43,634 10 0	516 1 8	Not furnished by the Executive Engineer.	...	3	1,637 0 0	*	*	* The information is stated to be not available in the Taluk.
1916-17	35	17	26	44	43,965 10 0	516 1 8		...	3	3,949 0 0	.....	*	0 The number quoted is wrong. The explanation is called for.
Dodballapur—													
1915-16	...	...	...	...	.....	.....	do ...	...	18	5,928 10 0	*	...	(a) Includes 10 under restoration.
1916-17	37	5	33	55	32,565 7 3	2,365 6 10	do ...	...	11	1,309 8 3	.....	...	(b) Includes 11 under restoration
Kankanhalli—													
1915-16	3	1	26	76	4,205 2 0	.....	do ...	...	6	897 13 9	.....	...	
1916-17	3	1	26	76	4,205 2 0	.....	do ...	...	2	410 9 7	.....	...	
Channapatna—													
1915-16	...	...	...	...	18,866 9 0	1,477 12 10	do ...	...	1	386 0 0	*	*	
1916-17	...	...	...	...	18,866 9 0	1,477 12 10	do ...	...	5	5,031 0 0	.....	...	
Closepet—													
1915-16	...	...	26	90	12,043 12 4	752 12 0	do ...	...	2	1,550 10 2	*	...	
1916-17	...	...	28	88	12,043 12 4	752 12 0	do ...	...	3	568 5 10	.....	...	
Anekal—													
1915-16	24	15	44	97	43,096 10 0	2,965 7 7	do ...	...	(a) 11	2,261 1 9	... ..	...	
1916-17	..	...	...	...	43,096 10 0	2,965 7 7	do ...	...	(b) 13	808 0 0	.....	...	
Devanhalli—													
1915-16	...	...	...	...	35,054 12 0	490 3 6	do ...	...	Reported to be not available.		.....	...	
1916-17	...	...	...	...	35,016 4 0	493 7 9	do ...	...	.....		.. ...	...	

BANGALORE,

8th August 1918.

"Copy"

T. CHOKKANNA,

Offg. Deputy Commissioner,
Bangalore District.

BANGALORE DIVISION.

(5) Statement of Irrigation Works in the Bangalore District giving the particulars required by the Special Committee on Irrigation Developments in Mysore.

Taluk	Number of major and minor tanks restored and unrestored				Wet assessment realised	Irrigation cess realised	Number of major tanks restored and amount spent		Number of minor tanks restored and amount spent		Amount of irrigation cess spent on repairs of both major and minor tanks in the taluk		Total amount on irrigation cess realised for the whole Province and the items for which the amount was spent for each district during these two years	Remarks
	Major restored	Major unrestored	Minor restored	Minor unrestored			Number	Amount	Number	Amount	Major tanks	Minor tanks		
					Rs. a. p.	Rs. a. p.	...	Rs. a. p.		Rs. a. p.	Rs. a. p.	Rs. a. p.		
Dodballapur	37	5	33	55	39,565 7 3	2,365 6 4	...	.....	29	7,238 2 3	2,310 4 5		.....	
Magadi	19	2	43	108	38,520 2 0	509 5 9	...	.....	1	568 0 0	2,089 14 5		.....	
Channapatna	...	...	...	...	37,783 2 0	2,955 9 8	...	.....	6	5,417 0 0	862 13 9		.....	
Nelamangala	42	3	60	70	39,605 4 0	2,329 3 6	...	.....	9	7,758 0 0	2,030 5 0		.....	
Bangalore	...	...	...	...	.....	.....	...	98 15 6*	...	.....	964 5 4		.....	
Hoskote	..	...	..	...	.....	.....	...	.....	...	.....	3,281 0 10		.....	
Anekal	...	...	...	...	.....	.....	...	.....	...	.....	4,565 15 1	1,169 0 0	.....	
Devanhalli	...	...	...	...	70,071 0 0	983 11 3	...	.....	...	.....	1,550 4 11		.....	
Kankanhalli	...	...	..	...	.....	.....	...	.....	...	.....	238 2 0		.....	
Total ...	...	...	...	...	.....	.....	...	98 15 6	...	.....	17,893 1 4		.....	

* This represents amount spent on restoration of Nagavara talukR. No. 48 of Bangalore Taluk during 1915-16 prior to 1915-16 Rs. 4,037-9-10 had been incurred on this work. Hence total outlay incurred is Rs. 4,037-9-10 plus 98-15-6. Rs. 4,136-9-4.

"Copy"

N. P. SUBRAMANYA IYER,

Asst. Secretary to Government, P. W. D.

(6) Statement of Major tanks whose capacity is less than ½ of the atchkat, Mysore District.

Taluk No.	S. No.	Old Register No.	Name of village	Name of tank	Atchkat acres	Capacity units P. W. D.	Approximate capacity as per Marikanave Register
1	2	3	4	5	6	7	7
			MYSORE TALUK.				
8	11	10	Devanur	Tand	122 -7	...	7
9	12	13—45	Maragandanhally	Jagankere	110	...	26
10	13	13—44	Belavatta	Boppanhally kere	49—1	...	10
			T.-NARSIPUR TALUK.				
5	44	3	Kaliyur	Doddakere	163	...	94
30	232	31	Ukkalgere	Do	98—15	...	40
2	16	17	Chimmalli	Do	54	...	4
			CHAMARAJNAGAR TALUK.				
6	6	39	Suttur	Kattekere	172—35	70	70
7	7	45	Honganur	Bilikere	67	12·53	23
8	8	47—69	Jotigowdanpur	Kathunaikankere	254—17	65	65
14	14	48	Kagalavadi	Do	267	109	109
18	18	49	Sargur	Komarankere	32	...	23
23	23	78	Basavanpur	Nagaradkere	96	36	22
31	31	72	Haradanahalli	Maragadkere	387	130	180
32	32	60—61	Ramasamudra	Doddakere	1585	362	569
33	33	59	Byadmal	Shindikere	237	32	32
34	34	62—64	Chandalvadi	Kodimolekere	366	54	52
41	41	3	Chamrajnagar	Malekere	590	261	124
			NANJANGUD TALUK.				
7	10	26	Halepur	Tank	743	...	358
12	60	16	Shinduvalli	Do	102	...	21
			GUNDLUPET TALUK.				
29	39	1	Vijayapur	Amanikere	572	199	184
			HEGGADDEVANKOTE TALUK.				
...	...	...	Nil.	Nil.	.....	...	...
			HUNSUR TALUK.				
261	262	14	Tatanhally	Mogeyokere	96	37	32
260	261	7	Melhally	Arasankere	92	40	13
380	381	620	Chilkunda	Hosakere	58	...	22
525	576	501—496	Naganhalli	Nowlkodikere	108	21	25
607	151	797	Varanchi	Doddakere	80	...	16
			YEDATORE TALUK.				
...	.	...	Nil.	Nil.	.....	...	...
			KRISHNARAJPETE TALUK.				
246	1297	...	Haleyurjodagatte	Tank	73	...	7
256	1307	152	Bukankere	Doddakere	134	53	49
			NAGAMANGALA TALUK.				
29	318	110	Dodga	Tank	463	186	193
32	342	113	Hanganhally	Do	555	263	249
97	172	63	Somanhally	Do	66	19	21
			SERINGAPATAM TALUK.				
...	...	...	Nil.	Nil.	.....	...	...
			MANDYA TALUK.				
31	115	14	Kiragandur	Doddakere	181	55	83
81	167	55	Gandagere	Do	92	37	43
99	185	159	Maddur	Do	2435	1108	936
143	229	134—258	Kavadly	Doddakere tank	164	64	80
172	1190	197	Dundanhally	Puttanarasaiyanakatte ...	91	18	24
180	1262	187	Machahally	Urumundinkere	130	..	56
202	1226	254	Hagalhally	Doddakere	239	107	80
			MALVALLI TALUK.				
...	...	..	Nil.	Nil.	.....	..	..

(7) Statement of Major tanks whose capacity is less than ½ of the atchkat, Kolar District.

Taluk No.	Serial No.	Old Register No.	Name of Village	Name of tank	Atchkat acres	Capacity units, P. W. D.	Approximate capacity as per Marikanave Register
1	2	3	4	5	6	7	8
			KOLAR TALUK.				
...	290	204—84	Vakkaleri	Hirikere	77	27	27
...	515	600	Solagatta	Kodagikere or Doddakere ...	71	22	18
...	436	269	Mallandhalli	Urumundinkere	59	15	17
...	432	813	Cholghatta	Mavukere	67	29	27
...	423	226	Ammallur	Arlikere	94	...	28
...	406	812	Mailsandra	Amanikere	334	100	146
...	384	599	Madivala	Battakere	113	37	40
...	902	257	Purahalli	Dyavarkere	57	...	26
...	296	315	Nagnal	Urmundinkere	67	20	27
...	447	345	Jangatta	Tank	455	217	...
...	275	355	Yadahalli	Shattikere	73	31	16
...	384	64	Do	Satankere	56	20	21
...	345	173	Talagonda	Doddakere (Jodi) ...	180	51	46
...	...	155	Arbikottanur	Hirekere	77	29	30
...	...	199	Nernahalli	Doddakere	141	47	68
...	...	610	Dod Hasala ... —	Hoskere	64	30	27
...	...	608	Kuteri	Kodagi-Dodkere	87	34	13
...	...	630	Dimbachamarhalli ...	Doddakere	97	16	30
...	...	79	Shillanagere	do	95	37	44
...	...	86	Huttur	do	76	32	28
...	...	96	Abbani	do	88	36	34
...	...	609—809	Dimba	Kodagikere	87	...	13
			MALUR TALUK.				
...	...	118	Uddappanhalli	Doddakere	64	22	19
...	...	97	Karadibande	do	65	12	19
...	...	85—660	Thagikalhalli	do	75	...	5
...	...	456	Chudgondanhalli	Urumundinkere	58	15	15
73	96	457	Gonur	Doddakere	70	27	31
111	136	245	Ahannayya	Thimmarayagowdankere ...	50	13	14
234	274	3	Dod-Kadtur	Hongekere	63	21	28
248	300	53	Dod-Shivara	Amanikere	130	56	49
259	311	481	Kateri	Bilikere	57	28	21
370	196	115	Ramasandra	Hungikere	62	15	...
371	197	21	Toranhalli	Hoskere K. G.	72	10	...
			BOWRINGPET TALUK.				
144	165	675	Hudakala	Doddakere (Jodi)	76	16	25
141	162	...	Vatrakunte	do	75	28	26
124	75	519	Hunkunda	do	95	45	42
117	68	517	Doddur Karappanhally ...	Hannikere	53	17	15
112	63	15	Golhalli	Doddakere	200	80	80
106	57	33	Kamsandra	do	96	43	43
97	48	533	Uriga	Tubakere	57	16	5
96	47	594	Sonkuppa	Sogattukere	62	23	23
95	46	532	Uriga	Doddakere	76	20	22
98	49	587	Mallampalli-rayagedhally ...	Urmundinkere	68	20	22
73	24	216	Kyasambally	Raghavanayakankere ...	106	17	18
254	78	220	Maradgatta	Doddakere	58	12	11
12	27	210	Sundrapalya	do	160	80	...
331	449	462	Tamatinakanhalli	Yellojikere	62	24	19
368	489	693	Karmangala	Doddakere	66	24	24
404	543	612	Yalaburagi	do	59	20	26
409	548	625	Aitandhally	do	53	22	19
434	573	524	Malyamgurki	Amanikere	90	4	36
			MULBAGAL TALUK.				
550	760	743	Hanumanhalli	Doddakere	90	24	27
542	772	276	Anantpur	Chickkere	75	20	20
541	771	733	Dodgurke	Doddakere	57	26	26
552	782	736	Nallur	do	179	88	66
478	462	770	Pombrahally	Bylkere	83	26	20
440	489	506	Baiyapanhally	Cholankere	77	35	34
436	485	501	Hebani	Doddakere	297	97	72
423	472	499	Punyhalli	do	69	33	34
441	490	504	Manigattagolhally ...	do	109	37	37
413	462	613	Mushtur	Yattikere	73	22	32
385	434	463	Kagganatta	Nelasandrakere	69	32	28
377	426	492	Chickkur	Chikkere	86	39	24
358	407	585	Tondhally	Jonnakunte	58	7	6
322	371	30	Kappalamadagu	Voddinkere	99	44	47
207	256	627	Mallekuppa	Doddakere	151	67	75
192	241	623	Mudikere	do	75	36	18
162	211	649	Shettikal	Mailahurkere	50	16	17
139	188	48	Lakshettibally	Doddakere	67	33	30
60	72	3	Yandlakere	Tank	54	11	20
61	73	4	Sonvadi	Doddakere	99	36	31
62	74	5	Kavatenhally	do	95	33	42
46	58	181	Shringerichadamanhally ...	Hirekere	61	27	25
72	84	91	Madderi	Doddakere	173	60	48
			SRINIVASPUR TALUK.				
120	706	32	Aralkunte	Bandekere	67	32	16
109	691	579	Raghunathapur	Kondarajankere (Jodi) ..	101	21	38
71	653	30	Gotikunte	Chickkere	73	13	24
47	627	79	Maniganpally	Tank	55	23	24
12	474	419	Ternahally	Chellagattadkere	138	59	46
7	465	40	Manjalnagar	Kanagalkere	67	28	2
306	177	144	Pulagurkote	Amatinaikankere	87	35	30
312	183	147	Ildone	Doddakere	133	44	66

Statement of Major tanks whose capacity is less than half of the atchkat, Kolar District—*contd.*

Taluk No.	Serial No.	Old Register No.	Name of village	Name of tank	Atchkat acres	Capacity units, P. W. D.	Approximate capacity as per Marikanave Register
1	2	3	4	5	6	7	8
			CHINTAMANI TALUK.				
108	578	623	Nekundi	Doddakere	234	104	88
123	594	631	Kodadvadi	Tank	156	55	53
180	550	397	Anur	Naikankere	121	29	35
11	414	117	Kaivara	Doddakere	153	53	35
8	411	444	Vaijakur	Vanihankere	86	...	35
3	403	566	Akkimangla	Tank	118	54	34
130	144	29	Kattariguppe	do	48	...	16
			SIDLAGHATTA TALUK.				
10	106	39	Mallur	Tank	99	...	28
24	156	23	Amani	Billadkere	530	158	84
30	162	27	Nadapanaikanhally ...	Tank K. G.	87	...	36
31	163	28	Yannangur	do	70	...	23
56	629	341	Gonnenhally	Hoskere	71	21	14
68	641	200	Chokkanhally	do	51	...	18
105	686	321	Ganjigunte	Raddikere	71	29	10
132	714	15	Mummanhally	Doddakere	54	...	19
179	763	55	Bandemankere	Rachagowainkere	107	15	51
218	801	201	Buralkunte	Peddaiyankere	61	...	26
219	802	203	Thimasand	Amanikere	416	167	165
220	803	216	Minchenhally	Mudiyukunte	58	18	13
20	152	33	Shigehally	Amanikere	85	...	39
35	401	191	Bommempally	Doddakere	47	...	20
72	754	14	Tatibally	Tank	50	...	20
85	769	60	Dodtehally	Chicktehallikere	57	...	13
47	830	151	Shettikere	Urmundinkere	65	...	29
61	844	133	Venkatapur	Melinkere	58	...	24
63	846	134	Timsandara	Arsikere	262	...	65
82	1249	154	Kotagal	Urmundinkere	52	...	22
06	1282	63	Valasenhally	Rajankere	104	...	10
			BAGEPALLI TALUK.				
1	5	146	Bulasandra	Shettikere	79	...	15
3	7	144	Yalload	Kodagikere	109	...	39
451	1381	12	Hampsandra	Tank	177	55	38
460	1415	3	Halegudibanda	Tank Ramasagara	58	23	23
394	1316	44	Someshvara	do	214	31	45
101	1326	229	Varalkonda	Banlahallikere	70	..	23
106	1331	34	Somenhalli	Chikkere	147	30	20
111	1336	40	Dodnancharla	Kamraddihalli Tank... ...	157	47	48
413	1338	42	Tirmani	Tank	201	72	51
416	1341	50	Yarlakanhalli	do	80	30	25
422	1347	69	Sadasivanhalli	Mohinkere	58	...	20
426	1356	113	Gorlappanhalli	Tank	73	1	23
430	1360	96	Beechaganhalli	Chik-Ajjarayankere	247	15	94
66	920	333	Pedpalli	Tank	71	...	19
64	948	269	Machanhalli	Hoskere	149	...	25
117	971	292	Venkatapur	Doddakere	101	34	39
130	984	109	Pulagal	Gudibande Hoskere	153	33	20
136	990	117	Chakvel	Hoskere	59	28	28
152	1006	124	Nalagutalapalli	Borlukere	60	...	12
184	1038	106	Chinganpalli	Yeragundikere	168	63	51
268	1122	888	Gortipalli	Hoskere	72	30	26
282	1136	792	Ramnodampalli	do	73	..	32
291	1145	756	Chancharayanpalli ...	Doddakere	63	...	33
296	1150	765	Maddalkane	Tank	47	..	12
297	1151	765	Gulur	Doddakere	176	83	85
329	1183	718	Sadlavarpalli	Urmundinkere	53	...	16
344	1198	639	Bagenhalli	Vaddu	131	...	42
363	1317	408	Mallikurki	Sabbaiyankere	76	...	25
439	1369	560	Pargod	Tank	136	...	38
446	1376	647	Hoshudya	Melinkere	59	27	23
447	1377	648	Do	Kelaginkere	78	11	12
450	1380	656	Putparti	Nimalpallikere	148	...	60
			GORIBIDNUR TALUK.				
5	8	16	Cholshettihalli	Hoskere	128	...	17
10	13	143	Kottur	Herikere	133	35	46
18	14	136	Manivala	Tank	437	211	122
19	15	163	Pulmakalahalli	Padalkere	59	18	10
24	30	17	Velapi	Chickere	127	30	46
25	31	167	Laksandra	Dasarlahallikere	139	27	30
27	33	154	Dodinaikanpalya	Maimalleswarkere	216	75	75
32	38	188	Bomsandra	Naikarallkere	180	30	30
33	39	184	Venkatapur	Tyammankere	180	37	35
34	40	189	Bomsandra	Rampadakere (Private) ...	75	2	22
38	44	155	Hudagur	Doddakere	970	150	155
42	48	156	Do	Chickkere	... ..	174	156
39	45	159	Virapsandra	Urmundinkere	84	40	34
40	46	164	Badinuilur	do	89	23	26
44	50	166	Baichapur	Yerrakunte	102	15	16
48	54	18	Kudamalkunte	Malleswarankere	164	52	44
53	58	191	Dodkuragod	Doddakere	259	119	90
54	59	12	Chikkarugod	do	134	30	34
59	64	27	Shaganhalli	Lingapankere	211	38	49
60	66	183	Vamagondlu	Hoskere	117	44	19
65	70	192	Balraddihalli	Puttnarnappankere	231	72	34
66	71	179	Kadabur	Trvarekere	194	43	28

Statement of Major tanks whose capacity is less than half of the atchkat, Kolar District—*concld.*

Taluk No.	S. No.	Old Register No.	Name of village	Name of tank	Atchkat acres	Capacity units P. W. D.	Approximate capacity
1	2	3	4	5	6	7	8
			GORIBIDNUR TALUK.—concld.				
67	74	21	Gansandra	Madagankunte	312	48	51
72	77	4	Do	Hoskere	230	60	100
76	81	2	Korubarhalli	Nanjappankere	216	74	73
77	82	29	Hiribidnur	Laddikunte	69	13	13
85	98	77	Honmamanahalli	Tank	120	23	30
95	107	64	Kadaradevarhalli	Hoskere	65	25	12
101	114	62	Halkur	Sannakere	56	16	16
102	115	25	Madanhalli	Do	116	9	9
104	117	30	Hudavatti Nagasandra ...	Do (private)	69	20	23
105	118	199	Halganhalli	Urmundinkere	260	45	61
112	128	192	Idagur	Doddakere	363	148	118
113	129	31	Gundapur	Do ...	111	23	20
115	131	33	Vaichakurhalli	Sannakere ...	119	44	38
123	139	60	Gadure	Doddakere	466	199	211
132	160	48	Mudikere	Do	287	129	139
135	163	38	Sonaganhalli	Purnambudkere	594	159	166
140	170	40	Rampur	Kodagikere	98	34	29
144	174	49	Kuradi	Mikalkere	74	12	22
149	179	195	Kundihalli	Chickkere	99	35	28
			CHIKBALLAPUR TALUK.				
3	88	58	Dodmarli	Amanikere	223	56	45
4	93	44	Nandi	Lakshimisagar	83	40	33
5	95	45	Kuphalli	Tank	19	13	15
7	96	47	Chandalpur	Do	8	18	22
13	102	50	Kolvanhalli	Bonnahallikere	93	5	20
25	116	4	Dinnehoshalli	Rangadhamankere	327	151	126
28	119	13	Mustur	Tank	103	23	23
30	121	194	Horabanda	Do	70	29	27
41	139	9	Hoshudya	Do	S. I. 166	48	35
44	137	197	Dibbur	Hoskere	134	62	55
45	138	199	Kattariguppe	Tank	163	62	37
55	759	203	Badaninganhalli	Do	71	26	19
99	1355	94	Roparihalli	Amanikere	72	21	17
109	1394	77	Mandikal	Doddakere	97	26	11
114	1399	73	Kambalhalli	Byrashettikere	85	27	24

BANGALORE,
24*th July* 1918.

N. S. KRISHNASWAMY IYER,
For *Executive Engineer, Irrigation Division.*

Statement of Major tanks whose capacity is less than ½ of the atchkat, Tumkur District.

Taluk No.	S. No.	Old Register No.	Name of village	Name of tank	Atchkat acres	Capacity units P. W. D.	Approximate capacity
			TUMKUR TALUK.				
4	656	321	Chennenhalli	Kere	86	35	35
5	657	303	Bellani	Amanikere	247	105	98
6	658	307	Aslipur	Kere	132	49	27
7	659	328	Gowdihalli	do	110	...	33
8	660	312	Narvangal	Amanikere	627	190	193
12	664	308	Mudagere	Kere	131	57	57
17	669	233	Kora	Amanikere	406	148	148
25	685	202	Bitankurike	Kere	65	...	19
26	686	196	Devalapur	do	159	55	55
32	692	236	Karikere	do	69	...	12
36	696	250	Chickgundagal	do	106	4	20
39	699	245	Hirigundagal	do	167	44	44
41	701	1	Hiri Totlugere	do	192	51	51
42	702	200	Malehalli	do	100	22	22
43	703	288	Hanchihalli	do	69	8·25	8
45	705	235	Kuchangi	do	155	61	61
47	707	16	Oorukere	Sulad Ane ... — ...	292	60	60
65	726	2	Tumkur-Vaderhalli ...	Kere	83	17	28
76	737	30	Settihalli	Kingette	73	...	20
90	754	28	Do	Uttrakatte	144	26	35
92	756	...	Kesaramadeva	Jogikatte	198	...	18
107	783	..	Lakshmanasamudra ...	Kere	60	...	15
106	782	22	Kambatnahalli	do	101	...	19
110	786	21	Malsandra	Amanikere	788	354	354
116	792	23	Doddasarangi	Kere	109	...	43
118	794	21	Adlapur	do	147	...	37
127	804	25	Ariyur	Dodakere	249	76	76
131	855	273—157	Shirvara	Kodagikere	111	...	35
142	868	...	Hallenhalli	Kere	125	...	22
145	871	130	Viranaikanhalli	do	92	...	23
154	887	127—128	Mulmukunte	Chickkere or Doddakere ...	173	...	43
158	891	115	Honasgere	Urumundinkere	257	75	75
164	897	266—158	Kembalal	Amanikere	792	160	125
171	904	137—245	Nidavalalu	Kere	155	49½	49
195	242	124	Kolala	Doddakere	116	48	48
200	248	...	Putasandra	do	117	...	28
216	285	170	Beldhara	Kere	74	5	10
			KUNIGAL TALUK.				
25	952	63	Turaganur	Tank	91	35	24
30	957	56	Kantanhalli	Kuntahalli	367	141½	56
			Mavinhalli Hanta... ...	Tank			
54	1066	12	Nilathahalli Ane-Hanta ...	Kalyanikere	282	112	104
64	1077	0—208	Kalkere	Tank	141	...	27
68	1081	111—203	Halvagal	Hirikere	107	50	18
75	1088	105—197	Yaliyur	Tank	358	70	138
78	1091	0—10	Chennapur ... —	do	122	...	34
97	1170	76—168	Holalgunda	do ... — ...	251	28	25
99	1172	78—170	Kodagihalli	do	148	55	31
102	1115	64—156	Amrutur	Doddakere	548	269	257
104	1117	70—162	Hoskere	Tank	94	42	22
117	1130	...	Kilara	do	161	...	51
160	1182	4—96	Nidsale	do	94	30	33
			GUBBI TALUK.				
16	589	136	Kurubarhalli	Tank	190	...	80
20	593	80	Aranhalli	do	114	55	55
40	613	54	Kodinagenhalli	do	125	...	51
50	623	44	Tippur	Doddakere	76	36	36
51	624	43	Ammangatta	do	151	43	43
64	637	366	Kodiyal	Tank	119	53	53
65	638	365	Chelur	Bangehallikere	102	...	41
70	643	363	Do ...	Amanikere Urumundalkere ...	273	132	130
78	651	315	Doddanetikunte	Amanikere	273	131	131
81	796	13	Adagur tank	Tank	308	106	62
86	811	12	Prabhavanhalli	do	146	71	71
128	853	113	Galaga	Doddakere	88	...	33
			TIPTUR TALUK.				
35	406	159	Vadavinaghatta	Tank	114	53	53
43	415	225	Kanatur	do	133	27	59
57	475	190	Sasalhalli	do	127	50	50
72	519	68	Tadasur	do	128	30	30
73	520	86	Kirikodi	Chickere	127	...	57
79	526	149	Sugur	Tank	85	68	18
86	533	64	Kannagatta tank or ...	Kanneramankere	296	76	74
89	536	90	Madihalli	Boregowdankatte	91	...	3
94	541	72	Bennayakanhalli	Urumundinkere	89	30	30
96	543	189	Hindasgere	do	106	30	30
104	551	92	Kondlighatta	Tank	82	20	26
105	552	83	Kuppal	do	77	36	36
106	553	84	Kardal	do	239	90	90
114	561	282	Turuvekere	do	1,562	687	6·7
121	568	28	Biligere	do	131	56·6	34
191	613	2	Honnavalli	Badagikere	188	84	83
135	399	111	Alur	Thimmakattekere	85	...	26
144	408	120	Saratvalli	Amanikere	175	...	54

Statement of Major tanks whose capacity is less than half of the atchkat, Tumkur District—*concld.*

Talnk No.	S. No.	Old Register No.	Name of village	Name of tank	Atchkat acres	Capacity units P. W. D.	Approximate capacity
1	2	3	4	5	6	7	8
			CHIKNAYAKANAHALLI TALUK.				
11	325	7	Belavadi	Chickattekere	105	...	30
13	327	26	Bavanhalli	Durgadkere	460	165	150
36	350	12	Byalkere	Chickkkere	105	25	25
40	354	...	Muddanhalli	Melinkere	203	75	57
46	360	28	Bangarkere	Urumundinakere	118	...	32
55	369	13	Dabbegatta	do	85	23	8
70	387	20	Settikere	Ajjankere	87	26	29
72	390	1	Madihalli	Virashettikere or Komatigankere	104	...	23
79	443	7	Kuppur	Tank	73	...	33
			SIRA TALUK.				
4	76	202	Harogere	Sannakere	189	50	53
55	141	127	Hemdore	Doddakere	247	90	75
59	145	165	Chengavara	Bomgondanhalli Hodagigere ...	118	...	49
150	285	136	Devarhally	Tank	11	18	21
132	267	81	Yalladabagi	Bakshikere	160	48	61
68	157	139	Melekunte	Tank	105	...	43
168	315	114	Lingashettihally	Vaddu	138	33	..
			PAVAGADA TALUK.				
12	30	...	Rangasamudra	Tank	230	...	108
27	45	196	Mangalwad	Akkalalakere	194	75	88
32	50	154	Madde	Yeregarakere	99	46	39
33	51	156	Tumkunte	Anjaneyankere	156	66	73
67	65	509	Dommatamari	Nagarkalkere	135	47	45
103	142	144	Kotur	Kariyannankere	141	64·5	58
110	149	211	Dawadbetta	Gowdankunte	87	...	8
			MADDAGIRI TALUK.				
7	680	191	Dassalkunte	Tank	210	96	72
12	169	71	Norlekere	Doddakere	63	29	28
14	171	70	Nagigondanahally... ...	Tank	75	...	34
21	178	39	Dodderi	Hirikere	194	61·25	62
25	182	51	Nagenhally	Harankatte	56	27·00	27
45	121	173	Yakaralhalli	Tank	419	103	157
46	123	201	Tingalur	Narasimhaiengar kere ...	286	...	32
47	124	172	Kadagattur	Doddakere	1,233	628	No capacity as per taluk Register
82	132	235	Nittrahalli	do	165	30	
89	220	45	Bommaldevipura	do	83	10	41
114	284	14	Voddarhally	Urumundinake	120	47	56
149	322	230	Byala	Doddakere	157	79	73
178	351	211	Maidanhalli	do	223	65	69
181	354	171	Polenhally	Tank	169	50	44
182	355	180	Vitlapur	do	71	..	20
208	42	135	Doddayalkur	do	146	72	68
214	48	126	Cholinhalli	do	115	35	28
243	92	90	Raddihalli	Doddakere	191	51·50	88

N. S. KRISHNASWAMY IYER,
For *Executive Engineer,*
Irrigation Dn.

BANGALORE,
24TH JULY 1918

Statement of Major tanks whose capacity is less than half of the atchkat, Bangalore District.

Taluk No.	S. No.	Old Register No.	Name of village	Name of tank	Atchkat acres	Capacity units P. W. D.	Approximate capacity
1	2	3	4	5	6	7	8
			BANGALORE TALUK.				
7	141	257	Dod Togur	Kodagikere	85	...	33
13	207	201	Kodati	Doddakere	110	53	49
17	211	205	Gangur	Jambu ane or Doddakere ...	123	18	9
26	221	216	Chickkanalli	Doddakere	167	79	63
30	227	214	Kaikondanhalli	Urumundinkere Mowjikere ...	53	22	20
42	239	248	Begur	Naganaiankere	...	21	26
57	254	245	do	Doddakere	375	135	129
63	260	224	Gottigere	do	85	...	37
66	263	229	Hulimavu	Urumundinkere Amanikere ...	388	185	156
76	273	219	Bilikanhalli	Lingarimankere	106	...	29
93	287	12	Kormangala	Doddakere K. G.	157	61	42
91	288	15	Shinvagal	Amanikere	66	...	24
109	306	54	Benniganhalli	Urumundinkere	136	...	32
122	319	171	Nallurhalli	Kodagikere	74	35	9
126	323	175	Sadarmangala	Tank or Gramad kere ..	64	15	23
132	329	163	Krishnarajpur	Gangadharbattar kere ..	52	25	19
133	330	164	do	Vengaiyankere	108	39	45
137	338	32	Hormava Agara	Gramadkere	136	...	30
146	348	40	Chickmaranhalli	Kodagikere	113	18	24
153	354	48	Nagvara	Tank	200	25	24
159	360	115	Attur . ..	Doddakere or Gramadkere ..	75	6	32
239	506	135	Abbigere	Tank	89	25	12
241	514	147	Choksandra	Tank or Dasarhalli tank ...	85	20	14
210	481	228	Matkur	Tank	85	37	34
190	461	185	Sadenhalli	do	63	...	24
			HOSKOTE TALUK.				
23	377	126	Wadhalli	Tank	92	...	29
18	370	130	Hoshalli	Mannukere	60	22	23
19	371	132	Dodganhalli	Tank	107	...	52
42	8	20	Urohalli	do	57	...	24
50	16	28	Honchanhalli	do	83	...	25
52	18	30—39	Vagata Agrahar	do Jodi	107	...	22
56	22	31	Makanhalli	do	95	42	41
57	23	32—44	Kodihalli	do	165	81	71
69	35	48	Devangundi	Madigakere or Hoskere ...	84	...	17
84	50	55	Tattanur	Chickkere	74	27	21
90	58	233	Marangere	Tank	63	...	5
92	107	234	Gundur	Doddakere	82	36	9
64	30	57	Mutkur	Urumundinkere	50	...	10
97	4	201	Bommanhalli	Tank	81	...	16
103	171	103	Istur	Amanikere	99	...	25
109	178	100	Sulebele	Chickkere	432	74	55
113	182	109	Hashigala	Tank	179	42	50
126	198	1	Kalappanhalli	do	129	52	29
135	207	15	Attur	do	181	..	40
149	190	238	Mugalur	do or Kodagikere ...	90	...	28
153	196	263	Belgere	Tank	133	...	12
166	388	67	Huvin Ane	Amanikere	284	105	91
			DEVANHALLI TALUK.				
101	449	74	Alur	Duddanhalli Tank	93	30	28
108	456	177	Bettenhalli	Doddakere Jodi	62	35	30
19	25	151	Chickjala	Tank	75	...	18
21	27	157	Tarubanhalli	do	84	42	26
33	39	139	Somatanhalli	do	96	41	31
39	45	128	Kannamangala	do	116	44	39
57	63	78	Devastan Amanikere ..	Amanikere	241	63	43
65	71	129—15	Gokere	Tank	94	24	21
72	78	193	Tilgere	do	80	...	29
73	79	192	Karhalli Amanikere ...	Hoskere	486	6	47
79	85	35	Dandiganhalli	Tank	121	6	50
85	173	43	Konaginbele	do	231	88	45
			DODBALLAPUR TALUK.				
5	308	49	Kanamangala	Chennarayankere	107	31	25
10	313	36	Dodwadigere	Tank	67	27	23
11	314	29	Honnuvara	Doddakere	170	43	37
16	319	42	Shinvadipur	Tank	120	24	29
35	338	283—60	Dod Belvangala	do	53	24	16
42	345	323	Kadnur	Hirekere	102	50	48
44	347	31	Istur	Mallegowdanakere	80	21	38
68	378	107	Tippur	Chickkere	80	31	22
96	406	182	Heggadihally	Malankere	66	...	6
97	407	...	Machagondanahally ...	Chickkere	93	...	11
98	408	176	Melkote	Doddakere	170	68	55
95	405	...	do	Kanchigattadkere	108	14	14
99	409	167	Bidekere	Tank	183	58	51
105	415	156—40	Gulva	Nandigunda Tank	123	26	16
106	416	192	Kodigehally	Tank	120	12	15
107	420	222	Linganhally	do	280	137	...
122	435	18	Chick Tumkur	Amanikere	90	24	24
150	234	123—125	Hulikunte	Hosakere or Haleke ...	62	30	28

Statement of Major tanks whose capacity is less than half of the atchkat, Bangalore District—*contd.*

Taluk No.	S. No.	Old Register No.	Name of village	Name of tank	Atchkat acres	Capacity units P. W. D.	Approximate capacity
1	2	3	4	5	6	7	8
			NELAMANGALA TALUK.				
9	128	181	Honnarayanhally... ...	Tank	101	24	...
27	147	142	Kambal	Doddichickankere	128	...	24
30	150	148	Machanhally	Kere	79	14	16
32	152	151	Kerekattigannur	Tank	80	23	37
45	165	126	Lakkur	Do	62	29	30
60	180	134	Oblapur	Doddakere	131	39	46
62	182	138	Tynagondlu	Hirekere	494	130	219
68	188	105	Dodbele	Doddakere	86	32	31
72	192	109	Do	Konnankere	129	15	...
88	208	255	Begur	Chickkere	77	...	20
92	212	96	Bhairanhaily	Tank	77	24	16
114	234	65	Budihal	Tank Jodi	60	...	11
120	240	21	Yelchgere	Tank	74	14	...
126	246	17	Gabbur	Chickkere	99	17	12
149	269	214	Sondkoppa	Tank	189	63	...
164	284	6	Dasanpur	Do	72	24	..
178	298	57	Honsandra	Do	181	79	77
179	299	59	Alur	do	155	76	56
190	526	306	Machohally	Doddakere	84	26	...
209	770	208	Devarahosahally	Do	443	114	135
			MAGADI TALUK.				
38	92	193	Gudemaranhalli	Doddakere	158	58	58
55	121	140	Banvadi	Do.	180	79	63
129	1002	215	Hulikal	Hirekere	676	148	247
134	1009	112	Shrigirpur	Doddakere	115	26	19
135	1010	125	Marsandra	Mallappanahally kere ...	191	79	59
147	1022	212	Maisandra	Tank	387	137	62
181	1056	56	Baganigere	Urumundinakere	134	53	24
221	1315	33	Kalya	Doddakere	148	66	45
237	1361	1	Magadi	Gowrammankere	100	..	33
			CHANNAPATNA TALUK.				
123	1250	125	Akkur	Doddakere	185	59	12
131	1258	133	Hottiganahosahally ...	Minakere	77	...	5
136	1264	44	Nagvara	Hirakere	212	42	47
161	1354	100	Mangalvarapete	Ramammanakere	432	179	190
171	1364	108	Tagachgere	Harisandrada Tank	125	10	47
182	1375	171	Mungadhally	Mallikere	132	31	14
186	1379	212	Kodambally	Doddakere	270	105	81
			KANKANHALLI TALUK.				
			Nil.				
			ANEKAL TALUK.				
9	9	59	Somandur	Cholankere	59	19	19
12	12	54	Balur	Ramaiyanakere (Private) ...	86	..	21
18	18	26	Halehally	Basanakere or Doddakere ...	79	...	20
23	23	24	Bestamanhally	Anekere or tank	58	18	16
29	29	20	Bidarugere	Doddakere	102	39	35
40	40	10	Anekal	Rajankere	123	...	7
55	55	5	Byagaddenahally ... :	Tank	60	15	26
72	72	62	Iggalur	Kodagikere	82	16	27
78	78	65	Nosenur	Tank or Chickere	85	...	8
80	80	66	Haragadde	Dodakere	143	...	61
94	94	141	Mantapa	Urumundinadoddakere or Ramgowdanakere.	70	...	28
103	103	182	Hulhalli	Matadkere	60	14	12
104	104	148	Bhujangadas Amanikere ...	Kodagikere or Bhujangadaskere.	122	39	55
105	109	180	Bhangipur	Hoskere S. I.	75	..	19
108	112	154	Hulimangala	Dodakere	194	51	47
114	118	73	Bande Nelasandra... ...	Urumundinakere	64	...	16
118	122	184	Kachanaikanhalli	Thondaraddikere	65	...	11
119	123	95	Kitkankanhalli	Attikere S. I.	54	...	13
127	131	226	Bomasandra	Tank	114	30	27
132	136	204	Gnlimangala	Sarkerkere or Hoskunte ...	65	...	19
149	157	228	Bikkanhalli	Tank	73	...	31
176	186	238	Dodda Timasandra ...	Adukere	67	...	21
184	223	194	Kudlu	Doddakere	76	:	24

N. S. KRISHNASWAMY IYER,
For *Executive Engineer.*
Irrigation Division.

BANGALORE,
24th July 1918.

IV.

The Problem of Medical relief to the Rural population.

Mysore is an agricultural country comprising 29,432 square miles containing two large cities of Bangalore and Mysore, 6 districts and 70 taluk headquarter towns with a population of 55 lakhs of which the urban population is 5 lakhs and the rural about 50 lakhs. The cities of Bangalore and Mysore are provided with big hospitals like the Victoria and Krishnaraj hospitals besides maternity hospitals and 13 dispensaries. The other district and taluk headquarter towns which contain the remaining urban population are provided with about 170 hospitals and dispensaries. The rural parts of about 50 lakhs are provided with only about 63 dispensaries and 4 itinerant dispensaries and most of the population in them is almost entirely dependent for medical aid on Vaidyas and Hakims of whom an appreciable proportion are quacks. The only part of the rural population which has access to assistance from the recognised medical institutions is that being within a radius of 2 or 3 miles from the place where they are situated and comprises at best about 10 lakhs of people and the remaining 40 lakhs are practically without medical aid, and yet, it is these, who are the backbone of the country and contribute the major portion of the revenues.

Cholera, plague and malaria in its protean forms claim their toll from these uncomplaining toilers and very often births are countervened by the death of the bearers. And yet one should have thought that in an agricultural country, the industrial efficiency of the raiyats would be the first care of the State, even apart from the moral right arising from contribution to the revenues. Without development of the personal element, economic action is an empty form and progress an elusive phantom.

This essential aspect of the problem of medical relief was brought up by me before the Representative Assembly at their April session and its justness and vital importance were unanimously realised and admited and a Committee was appointed consisting of the following gentlemen to consider the question and suggest practical action.

Mr. C. Ramachandra Rao, Ayurvedic Physican (Krishnarajpete.)
,, K. Krishna Sastry,
,, R. Gopalswamy Iyer,
,, Meer Mahomed Sab,
,, Mahomed Jaffur Sab,
,, H. V. Rangasami,
,, Amble Anniah Pandit,

They have favoured me with their written opinions which are given as appendices. A meeting was convened on the 11th of August in Mysore which was attended by all the members except Messrs. Gopalswami Iyer, Krishna Sastry and Rangaswamy. Messrs. Venkatakrishniah, Sreenivasa Rao, Coffee Planter, Principal of the Ayurvedic College and Hakeem of the Unani Dispensary were also present and gave their valuable experience. A number of Ayurvedic and Unani dispensaries were also visited and the suggestions given in the report embody the points on which we arrived at a decision on a full discussion of the issues.

The valuable pamphlet by Mr. Chakravarti, Financial Secretary, on Problem of medical relief, was read before the Committee and notes were taken from it for drawing the report. The Senior Surgeon and some other eminent men of the medical profession were also consulted. Mr. Subbanna, Sessions Judge, Mysore, who as an inamdar of a number of villages takes an active interest in providing medical relief to his ryots has kindly sent a note on the subject which is also included in the Appendix.

My report embodies all the suggestions given by the gentlemen named above and I am in almost complete agreement with them, as Mr. Chakravarti eloquently points out the inadequency of the aid given by a single dispensary to the large population who live in the interior of each taluk and the distance people in the borders have to travel to reach the dispensary.

The usefulness of a dispensary diminishes very rapidly with the distance and is practically non-existent beyond a radius of 5 miles.

The question before us is how best our Government can discharge the admitted duty of all civilized States in regard to public health: Mr. Chakravarti proposes that all Hobli Headquarters and their important villages should have a medical man with a stock of medicines and medical appliances. The area of the Mysore State is 22,432 square miles and there are 373 hoblis. The average area of the hobli may therefore be taken as 79 square miles which will be equal to that of a circle of 4 to 5 miles radius. If there is medical help available at each hobli headquarter we may say that every man in the State will have medical assistance available within 4 or 5 miles from his place of residence. This should be the ideal we should

strive to reach. We entirely agree with him in his ideal but we do not agree with him in the sort of medical men he recommends. The lives of villagers are as valuable as the lives of the towns-people and when we give the latter the best up-to-date medical help, we see no reason why the rural population should be treated otherwise. It should be the aim of the Government to provide the same high grade of medical relief throughout the State..

The medical men to be provided should possess at least the qualification of a Sub-Assistant Surgeon trained in the Medical School now opened by the Government and should be able to treat all sorts of ailments. Their emoluments should be the same as those of other Sub-Assistant Surgeons such as the men in charge of taluk dispensaries. We doubt very much whether students who have read up to the Lower Secondary Standard, as Mr. Chakravarti suggests, would be able to understand the medical science written in the English language and whether two years' practical training given without theory would convert these men into reliable physicians. We rather think that the step would only add to the swarms of quacks who plant the countryside with untimely tombs. We are emphatically of opinion that such assistance would be infinately worse than none at all as it would in addition to endangering human life, indefinitely postpone action on really efficient lines.

Opening dispensaries in each hobli and appointing a Sub-Assistant Surgeon to such dispensaries should be an ideal which we should strive to reach. But it is not possible now to start them in every hobli considering the enormous cost it would entail upon the Government.

1. The area of the Mysore State is 29,474 square miles and the number of taluks is 70. The average area of a taluk may be taken as 420 square miles which will be equal to that of a circle of 24 miles radius. The population of the taluks excluding that of the cities where adequate medical help is provided is about 55 lakhs and so the average rural population of a taluk is about 78,000.

We should now make a beginning by providing one more dispensary for taluks having a population of 78,000 and less and two more for those having more. The total number would then be about 100. The total initial cost for hundred dispensaries would be a lakh and fifty thousand and the recurring cost at Rs. 150 per month would be Rs. 1,80,000 per year. Until pucca buildings are erected, the dispensaries might be located in rented building which would cost another Rs. 10 a month.

Initial cost would be	...	...	...	Rs. 150,000
Recurring cost	...	...	...	„ 180,000
Rent of building	...	...	...	„ 12,000

By this arrangement, a Sub-Assistant Surgeon would be able to minister to the wants of about 30,000 inhabitants inhabiting about hundred villages. This is no doubt a very small beginning but one on absolutely right lines we shall be going towards the goal and not away from it as we would be doing, were we to let loose a battalion (to see Mr. Chakravarti's phrase) of licensed quacks on our unfortunate countrymen.

Itinerant Medical Men.

2. No doubt the itinerant Doctor who really heels and not merely spends himself in the literary effort of fictitious diaries would be useful to the rural population more than the Medical man tied down to his dispensary. For the present there are two itinerant dispensaries in the Hassan District and two semi-itinerant in the Shimoga District.

We recommend that the additional dispensaries suggested by us may be made semi-itinerant ones and one more itinerant medical man be attached to the now existing Taluk Dispensary where the population of the taluk exceeds 70,000 and made to itinerate 3 miles away from the fixed hospitals. There are about 35 taluks containing a population of 70,000 and more and to provide these with itinerant Medical men would cost about Rs. 5,000 a month or Rs. 60,000 a year.

3. *Midwives.*—An equally important and cognate need which craves immediate attention is the want of midwives There are about 28 lakhs of women in the State of whom about a half are actually fulfilling the sacred function of maternity. If we exclude the female population of the Cities of Bangalore, Mysore and Kolar Gold Fields, we will have about 13 lakhs of women crying in vain for help. Justice in the popular faith that women dying in child-birth go to the same Heaven as Heroes slain in battle and no people which neglects its heroes and women can stand high in the scale of civilization. What words are pregnant enough for the pathos of another class of sufferers the poor innocents doomed to death before they are born for want of a little help in time?

There are about 130 midwives attached to the existing dispensaries in the taluks and these 130 have to attend to 13 lakhs of women during delivery time which works out to something like one midwife to 10,000 women, while in the Bangalore City with a female population of about 40,000 of which 20,000 may be said to require the services of midwives we have about 10 of them besides qualified private practitioners. Thus in Bangalore for

every 2,000 women a midwife is provided, while in the rural parts one for every 10,000. Considering the enormous death-rate amongst women and children in the rural areas owing to insanitary handling during the delivery period of women by untrained quack midwives and to the fact that once populous villages have become in the striking vernacular phrase "Lightless by this want it would be a crying reproach to us" if something is not done quickly to supply it. No solicitude would be too urgent and no expenditure too great in a cause like this.

We beg to propose that at least one midwife should be provided for each hobli so that every woman in the State will have the services of a midwife in her need available within four or five miles from her place of residence. This would work out roughly to about one midwife for every 8,000 women which by no means a luxurious provision is still as good a beginning as can be made immediately. Now the question is have we got the number ready for immediate work. If we have not, we should take immediate steps to train them. There are already hundreds of women in the villages who have some experence of practical midwifery and if these are selected and trained in the District Hospitals and female dispensaries and in the Maternity hospitals of Bangalore and Mysore, we shall probably have the number we want in a year. We believe that a handsome scholarship of Rs. 12 each would probably prove a sufficient inducement.

The initial expenditure under this item would be approximately Rs. 35,000 as shown below and recurring about Rs. 29,000.

There are 370 hoblies in the State and according to the above scheme we need 370 midwives but there are already midwives attached to the existing dispensaries which are about 130 in number. Thus deducting 130 we require about 240 midwives. Scholarships at Rs. 12 per month each, would be Rs. 2,880 per month or Rs. 34,560 per year.

So the initial expense for training midwives paying them a scholarship of Rs. 12 a month would cost the Government Rs. 35,000 and the recurring expense for the additional 240 midwives would be about 29,000 if their pay is fixed at Rs. 10 per month.

If a large number is trained say, a batch of 100 each year and scattered broadcast throughout the length and breadth of the State, they would settle as private practitioners in important villages. These would be in addition to the number of midwives to be apponted for each Hobli.

Being a very important and urgent need to the populace, we strongly recommend that immediate steps be taken to provide one Midwife for each Hobli.

Vaidyas and Hakeems.

All the members of the committee are of opinion that Ayurvedic and Unani medicines are better suited to our constitution and effect more radical cures than allopathic treatment and there is no doubt that this opinion is even more strongly held by the rural population. Our indigenous medical science has received very high praise from eminent English Doctors. It would be very useful indeed if at the Headquarter of each Hobli, an indigenous hospital presided over by an Ayurvedic or Unani Physician be opened. The next question would be the basis of selection of men for the charge of these institutions. Although there are undoubtedly able men among the Hakeems and Vaidyas who now enjoy practice and though time and again one hears of miraculous cures wrought by them, the majority are undoubtedly quacks who gamble in human lives. It is necessary to institute a reliable test of proficiency before accepting Vaidyas and Hakeems as worthy of responsible recognition.

Ayurvedic College

There is at present an institution in Mysore which goes by the name of Ayurvedic College which name it may owe either to courtesy or sarcasm. The so-called College is located in the upstairs of the market building in a dusty and ill-kept room and has an equipment of a bureau containing about 50 books and one or two benches which may be considered lavish provision for the two or three students who attend it. The College claims to have passed out 11 students since its establishment. One wonders whether these men step down from the *Alma Mater* to the dingy room on the ground floor which in savage derision are dubbed dispensaries. Malignity of the rankest partisan of Western medicine could devise no worse way of ridiculing the indigenous system than this travesty of a College. Some of the members visited the Dispensary and found that in spite of their wretched equipment they were very popular showing how great is the faith of our people in indigenous system of treatment.

We think that for these institutions to be of any use to the people or in ordinary fairness to the real science they represent, Government should provide a suitable building costing at leas Rs. 20,000 in some prominent place, say, near the Krishnaraja Hospital for the Ayurvedic and Unani College and appoint qualified professors who have passed out successfully from the Ayurvedic and Unani Colleges in Calcutta and Lahore.

Students in the College should be taught among other things, Anatomy, Physiology,

Pathology, Midwifery and Minor Surgery according to the Western system of medicine. To the College, well-equipped Unani and Ayurvedic Despensaries on up-to-date lines should be attached.

A piece of land with irrigation facilities should be provided by the Municipality to grow indigenous medicinal herbs. The note by the Muzrai Superintendent who is in charge of the so-called College contains useful suggestions for the reconstitution of the institution. The College should be affiliated to the University which should grant degrees for proficiency and the Medical Department should take charge of the Dispensaries. Two such dispensaries might also be opened in Bangalore and other importment District Towns, and students that have now passed out of the College might be appointed as Vaidyas of the Dispensaries with the necessary equipment to prepare medicines.

It is very necessary that a suitable building should be put up immediately for the College in Mysore and arrangements made to impart instruction on up-to-date lines as suggested above. The College should train men by hundreds and they should be sent for work throughout the State either as stipendiary or private practitioners.

A list of men practising as Vaidyas and Hakeems in the Province might be got from the Deputy Commissioners and those willing to undergo training in the College might be given a scholarship of Rs. 10 or 12 a month and trained for 1 year in the College. Those that pass out should be given a certificate and allowed to practice in villages. Others that do not get certificate should be forbidden to practice.

Summaries.

NEW DISPENSARIES.

1. To summarise, medical aid should be rendered available to all in the State within 5 miles of their residence. One Dispensary with a qualified medical man should be opened in Taluks where there is a population of 70,000 and one more for every 30,000 over it. The new Dispensaries should be semi-itinerant and an itinerant Sub-Assistant Surgeon should be attached to the Dispensary of the Taluk where there is a population of 70,000 and above who should be made to itinerate 3 miles way from the Taluk headquarter towns.

For 100 New Dispensaries.—

	Rs.
Initial cost at Rs. 1,000 for each Dispensary ...	1,00,000
Recurring cost at Rs. 150 per month	1,80,000
Rent of Buildings	12,000
Itinerant Medical men for 35 Taluks about Rs. 5,000 per month	60,000
Initial cost	1,00,000
Recurring cost	2,52,000

MIDWIVES.

The number of Midwives should be increased providing one Midwife at least for a Hobli. There are 370 Hoblis in the State and 130 Dispensaries and each Dispensary is provided with a Midwife. Deducting this number from 370 we will have to provide 240 more.

	Rs.
Initial cost of training 240 Midwives giving them each a scholarship of Rs. 12 for one year.	34,560
Recurring cost for the 240 Midwives if their pay is fixed at Rs. 10 per month ...	28,800
Initial cost	34,560
Recurring cost	28,800

AYURVEDIC AND UNANI MEDICINES.

Strenuous efforts should be made to put down quackery. Indigenous systems of medicine should be encouraged by the establishment of well-found Colleges affiliated to the University and training men for a degree and Dispensaries provided with up-to-date equipment.

	Rs.
Probable cost for the construction of a suitable building for the Ayurvedic and Unani Colleges	50,000
Dispensaries and equipments	5,000
Recurring expenditure	...
Pay of the Professors and Teachers at Rs. 1,000 per month ...	12,000
Scholarships to about 50 students at Rs. 10 each	6,000
Construction of an Ayurvedic and Unani Dispensary, Bangalore...	20,000
Recurring expenditure for the Dispensary of Bangalore ...	5,000
Initial expenditure	70,000
Recurring expenditure	27,000
Total initial expenditure is	2,04,000
Recurring expenditure	3,07,000

Although the estimate of costs given in the report is rough, it is based on the data kindly provided by the Senior Surgeon and the Principal of the Ayurvedic College. The initial cost for putting up building to locate the Ayurvedic and Unani Colleges and two Dispensaries in Mysore and Bangalore and to train the required number of medical men and Midwives would be about Rs. 2,00,000 and the recurring expenses about Rs. 3 lakhs if the whole scheme comes to working order. The construction of the College building and the training up of Sub-Assistant Surgeons, Midwives and Vaidyas and Hakeems might be taken up immediately and new Dispensaries be started as recommended in the report, as Medical men and Midwives become available.

We are of opinion that if a lakh of rupees for the construction of the buildings and the training of Medical men as part of the initial expense and a lakh more for recurring expenses be provided in the budget for 1919-20, this scheme might be brought to working order immediately and considering the importance of the subject as already pointed out in the preface, we are not asking too much from the Government as healthy and able-bodied intelligent people form the chief asset of the State, any large amount spent on providing Medical relief and education to the rural populace would pay the Government ten-fold in the long run.

This report may kindly be placed before a Committee consisting of medical men and a few non-officials presided over by the Senior Surgeon and they be asked to draw up a scheme on the lines given in the report. We are very thankful to Dr. Arumugam Mudaliar, Senior Surgeon for the valuable practical suggestion given by him for drawing up this report.

M. SUBBIAH,

Convener of the Special Committee for,

"Practical suggestions for improving medical aid in rural areas."

V

Report of the Special Committee on "the work of the Representative Assembly and the duties of its Members."

1. With reference to the Government Order constituting a Committee to investigate and report on "Work of the Representative Assembly and the duties of its members," the following final resolutions, indicating the work and the duties, which the members of the Assembly are prepared to undertake are resolved to be submitted to the Government by the Convener on behalf of the Committee.

(1) To educate their constituents and the public generally in respect of their political, civic and social and economic rights and obligations.

(2) To arrange subjects of general public interest being studied, worked up and reported upon to the members of the Assembly.

(3) To discuss and record their opinion on the general tenor of all Legislative Bills other than emergency ones, before they are passed by the Legislative Council.

(4) To move and pass resolutions in the Assembly on subjects of general interest including the draft annual budget.

(5) To vote on all questions of general interest.

(6) To consider and record their views on all questions relating to the enhancement of existing taxes, assessment, charges, etc., and the levy of new or additional taxes, assessment, charges, etc.

(7) To work as *ex-officio* members of the District Economic Committee along with such other members as may be nominated by the Government.

(8) To elect a panel of 6 persons out of whom one may be selected by His Highness the Maharaja, to be a member of the Executive Council of the State for the term of the Assembly.

2. The Committee is opinion that to attach a sense of responsibility to the members of the Assembly, the views of two-thirds of the members should be considered binding upon Government, subject to the veto of His Highness the Maharaja.

3. The Committee is further of opinion that, with a view to arouse and advance a sense of responsibility and render the deliberations of the Assembly more useful and effective and to induce all the available best intelligence of the State to co-operate with the Government and to satisfy in some measure, the legitimate aspirations of the people, it is essential that the foregoing suggestions may be kindly accepted and given effect to.

B. NARASINGA RAO,
Convener of the Special Committee for work of the Representative Assembly and duties of its members.

Appendix to the above.

THE REPRESENTATIVE HOME,
Mysore, dated 10th August 1918.

1. The Proceedings of the Special Committee of the Representative Assembly constituted by the Government in their Order No. G. 15077-127—G. M. 626-17-1, dated 9th May 1918, for investigation and report on the subject "Work of the Representative Assembly and the duies of its members."

Present.

Mr. B. Narasinga Rao (Convener in the chair).
,, C. Srinivasa Rao,
,, A. Ananthiah,
,, B. Sreenivasiengar,
,, M. L. Vardhamanaiya.

Absent.

Mr. S. Seetharamaiya.
,, Abbas Khan.
,, M. Venkatakrishnaiya.

Read letter from Mr. Seetharamaiya, Advocate of Shimoga, intmating his inability to attend the meeting on account of some domestic inconvenience.

Read Government order noted above.

The subject matter of the reference was freely and fully discussed and the members are unanimously of the following opinion :—

1. The anticipations of His Highness the Maharaja Sree Chamaraja Wodeyar Bahadur of revered memory and of his Dewan Mr. Rangacharlu as expressed in the Dasara Address in the years 1881 and 1882 regarding the usefulness of the Assembly and its steady growth, have been fully realized.

2. The generous and enlightened policy of the Government of Mysore throughout has afforded ample opportunities for the Representative Assembly to deserve expansion of its duties and responsibilities.

3. Accordingly, time after time, the Government have openly acknowledged the substantial, useful and loyal service which the Assembly has been rendering ever since its inception and in consideration thereof, the Government

(*a*) have been gradually strengthening the Assembly,
(*b*) have made it entirely an elected representative body,
(*c*) have broadened its franchise to its widest possible extent,
(*d*) have increased the number of its session and,
(*e*) have expressly accorded many important privileges.

4. Ever since the accession of His Highness the present Maharaja to the throne, the Assembly has had the good fortune to deserve His Highness' confidence and approval which have been expressed, in the Rescript issued by His Highness in 1916, in the following gracious words.

"The Representative Assembly has more than fulfilled the expectations which were formed at the time of its institution, and I have observed with gratification, the intelligence and moderation which have marked its deliberations and the increasing interest which its members have been showing in all questions of public importance connected with the administration of my State.

It is my earnest desire to increase still further, the mutual confidence between the officers of the State and the representatives of the people and to enable the latter to understand and identify themselves still more closely with the policy of Government."

5. Thus the Assembly has demonstrated its usefulness as an adjunct to the administration and the capacity of its members to render loyal and effective service in all matters which have been hitherto referred to it.

6. After 37 years of preparation and training, the Assembly has undoubtedly become fit to take its proper place in the machinery of Government and bear its share of real and responsible work.

7. The members of the Assembly individually and collectively are eager to work for the uplift of their country, if more opportunities are afforded to them.

8. The work of the Representative Assembly and the duties of its members may be divided into two parts :—

(1) The work which can be carried out by the members of the Assembly collectively and individually without reference to Government.
(2) The work which can be carried out by the members of the Assembly correctively or individually with the approval and co-operation of Government.

9. The work falling under sub-division (1) may consist of :—

(*a*) Educating the members of the Assembly, their constituents and the public generally in respect of their political, civic and social and economic rights and obligations.
(*b*) Arranging for subjects of general public interest being studied, worked up and reported upon to the members of the Assembly.

10. The work which the members of the Assembly can undertake with the approval and co-operation of Government consists of :—

(*a*) To discuss and record their opinion on the general tenor of all Legislative Bills, other than emergency ones, before they are passed by the Legislative Council.
(*b*) To move and pass resolutions in the Assembly on subjects of general interest including the draft annual budget.
(*c*) To discuss and vote on all questions of general interest.
(*d*) In conformity with the principle of "no taxation without representation," to consider and record their views on all questions relating to enhancement of existing taxes, assessment, charges, etc., and the levy of new or additional taxes, assessment, charges, etc.
(*e*) To work as *ex-officio* members of the District Economic Committee along with such other members as may be nominated by Government.
(*f*) To elect a panel of 6 persons out of whom one may be selected by His Highness the Maharaja to be a member of the Executive Council of the State for the term of the Assembly.

11. With a view to attach a sense of responsibility to the members of the Assembly,

the views of not less than two-thirds of the number of members should be considered binding upon the Government, subject to the veto of His Highness the Maharaja.

12. With a view to arouse and advance the sense of responsibility and render the deliberations of the Assembly more useful and effective and to induce all the available best intelligence of the State to co-operate with the Government and to satisfy in some measure the legitimate aspirations of the people, it is essential that the foregoing suggestions may be kindly accepted by the Government and given effect to.

It is 6 P.M., now. For further consideration and drafting of final resolutions, the meeting is adjourned to 1st September at 8 A.M., in the Modern Hindu Hotel, Bangalore.

The Convener may intimate to the Secretary to Government that the final resolutions would be sent on or before 10th September.

B. NARASINGA RAO.

II. *Proceedings of the adjourned meeting of the Committee, held on 1st September 1918, in the Modern Hindu Hotel, Bangalore.*

Present.

Mr. B. Narsinga Rao,
,, S. Seetharamaiya,
,, M. Venkatakrishnaiya,
,, A. Ananthaiah,
,, B. Sreenivasiengar,

Absent.

Mr. M. L. Vardhamanaiyu,
,, C. Sreenivasa Rao,
,, Abbas Khan.

1. *Read* letter dated 18th August 1918 from Mr. Mahomed Abbas Khan, a member of the Committee intimating that he would try to attend the meeting of to-day.

2. *Read* also Government Order No. 4451-5, dated 29th August 1918, intimating that the non-official members are not allowed to send their correspondence "on Government service" to other non-official members.

3. *Read* Government Order No. 4433, dated 29th August 1918, intimating to the Convener, that the report of the Committee should be submitted to Government as early as possible after 1st September 1918.

4. *Read* the proceedings of the previous meeting held at Mysore on 10th August 1918, and they were fully discussed, considered and confirmed.

5. The following resolutions indicating the work and the duties which the members of the Assembly are prepared to undertake are resolved to be submitted to Government by the Convener on behalf of the Committee:—

1. To educate their constituents and the public generally in respect of their political, civic, social and economic rights and obligations.

2. To arrange subjects of general public interest being studied, worked up and reported upon to the members of the Assembly.

3. To discuss and record their opinion on the general tenor of all legislative bills other than emergency ones, before they are passed by the Legislative Council.

4. To move and pass resolutions in the Assembly on subjects of general interest, including the draft annual budget.

5. To vote on all questions of general interest.

6. To consider and record their views on all questions relating to the enhancement of existing taxes, assessment, charges, etc., and the levy of new or additional taxes, assessment, charges, etc.

7. To work as *ex-officio* members of the District Economic Committee along with such other members, as may be nominated by the Government.

8. To elect a panel of 6 persons out of whom one may be selected by His Highness the Maharaja, to be a member of the Executive Council of the State for the term of the Assembly.

6. The Committee is of opinion, that, to attach a sense of responsibility to the members of the Assembly, the views of two-thirds of the members should be considered binding upon the Government, subject to the veto of His Highness the Maharaja.

7. The Committee is further of opinion that, with a view to arouse and advance a

sense of responsibility and render the deliberations of the Assembly more useful and effective and to induce all the available best intelligence of the State to co-operate with the Government and to satisfy in some measure the legitimate aspirations of the people, it is essential that the foregoing suggestions may be kindly accepted and given effect to.

B. NARSINGA RAO,
1st September 1918.

Proposed by Mr. Ananthaiah and seconded by Mr. Sreenivasiengar, and was resolved that the status of the members of the Committee regarding their batta and allowance, must be fixed at least on the scale allowed to the members of the Economic Conference, *viz.*,

(1) Single First Class fare (to and fro)
(2) Mileage at 8 annas per mile,
(3) Halting allowance of Rs. 5 per day, and,

with regard to those members who have been drawing batta and allowance on a higher scale, the same must be continued to them, as in the case of Government Officers in service or retired.

B. NARSINGA RAO.

VI.

Proceedings of the Special Committee constituted to investigate and to report on "Practical suggestions for preserving Village Topes and Avenue Trees and extending Arboriculture generally in the Maidan districts.

The Committee met at Mysore by the wish of the majority of the members on the 12th September 1918 in the Representative Home.

Present.

Messrs. 1. H. Krishna Sastry.
2. Huchaveeregowda.
3. Ramaswami Iyengar.
4. Halappa.
5. K. Ramanuja Iyengar.
6. B. Gundu Rao.
7. T. Narasinga Rao, (Convener).

Absent.

8. Karnick Krishna Murthi Rao.
9. Linge Gowda.

The subjects referred to this Committee were discussed and the suggestions of the members are given below:—

Avenue Trees.

There should be a list in each Taluk Office and a copy thereof with the village Shanbhog to show the particulars of trees to the usufruct of which private persons are entitled and those to which no individual is entitled. In the case of such trees the usufruct of which does not belong to anybody the right of the enjoyment thereof should be sold in auction, the proceeds being credited to the Village Fund. The maintenance of these trees, replacing them by new ones when they die out, and the enjoyment of their produce should invariably rest with title-holders, as has been the practice hitherto.

The trees in each village should be separately and independently numbered. If any persons to whose village there is no road, have planted avenue trees on any road, they should be held responsible for the maintenance of such trees in a proper manner. The Government should allow the removal of fencing materials such as pegs, thorns, etc., free of cost from any Government land, whenever required to enclose the replaced avenue trees. Whenever a private individual who has no right to the usufruct of any tree, plants avenue trees, he should be given a reasonable amount of bonus for every tree planted by him and the right of enjoyment of the usufruct of such trees should also be transferred to him.

The persons having a title to the usufruct of the trees should be made responsible for the removal of "Loranthus" (ಬಂದಾಳ) on their respective trees and the clearing of lantana all round such trees. The soil around the trees should be dug every year in the proper season, or at least once in two years by these persons. If a number of trees are found to be dying out contiguously such persons should plant new ones in between them and when these new trees are well established, the original trees may be cut and removed by these persons.

No gravel should be allowed to be removed within 25 yards of the avenue trees by the Public Works Department or their contractors and such removal should be penalised by Jamabandi officers after personal inspection.

Topes.

There should be a list in every Taluk Office and a copy thereof with each village Shanbhog to show the different *topes* of which private persons have a title to the produce (*Hakdari Tope*) and those to which no particular individual has a right (*Gundu Tope*). The practice is different in different places:—The produce is enjoyed by the title owner in some places and in other places it is otherwise. The Committee is of opinion that there should be a uniform practice in this respect throughout the State.

Each of the title owners should be allowed a definite and reasonable time to improve their respective topes and bring them to a satisfactory condition, and should they fail to do so within such time, the topes should be converted into; and treated as Village Topes (Gundu Topes).

It is absolutely necessary that every village must have a tope of its own. For such of the villages as have no topes now an extent of land, not less than an acre in area should be

allotted in a convenient place and persons raising trees therein should be encouraged by the grant of a reasonable bonus. The produce of these village topes should be sold in auction every year, and the sale proceeds credited to the Village Fund.

Whenever a new village tope (Gundu Tope) is to be formed and trees got up therein, only such plants as neem, tamarind, *honne* and *hippe*, etc., should be raised, and this work should be attended to by the villagers themselves.

There are persons in the enjoyment of inams for having planted avenue trees or for having got up village topes. These inamdars have not been as particular in maintaining them as they are in enjoying these inams, and the purpose for which these inams are intended is thus totally defeated. Such indulgence should be put a stop to in future, and whenever an inamdar is found to be in the enjoyment of his inam without satisfactorily discharging his duties devolved upon him, the Committee is of opinion that the inam should be immediately resumed to Government and some other satisfactory arrangement made for the maintenance of the avenue trees or the village topes as the case may be.

Arboriculture.

For extending the planting and cultivating timber, fruit, and fuel trees and other plants of economic value, the Committee suggests that a modification of the rules for the grant of waste lands for the planting of timber, fruit and fuel trees contained in Appendix H. to the Land Revenue Rules of 1890 is necessary. They may be modified as follows:—

(1) That assessed land to be granted should have lain "Banjar" continuosly for 10 years, should be removed.

(2) That the period during which the land granted is to be held free of assessment should be extended.

(3) That consultation with the Forest Department should be dispensed with, unless the extent applied for, exceeds 50 acres.

Thakavi loans either free of interest or on a nominal interest should be granted.

The Birthday of His Highness the Maharaja of Mysore should be considered as the Arbor day in the whole State. It may be extended to the whole month of June. If the local officers and influential men take part in the same, many thousands of trees can be planted each year, but previous arrangements should be made before planting, in selecting a site for each village or town and also in fencing the same.

Some members were also of opinion that the work of those who plant not less than 50 trees on that day and rear them for at least 3 years till they are well established should be recognised.

The establishment of nurseries to propagate fuel, fruit and timber plants, etc., in convenient centres under the supervision of the existing Horticulture Inspectors attached to the Districts will go a great way to improve Arboriculture in the State.

As goats are a great curse in the Development of Arboriculture in the State, the Committee suggests that every person rearing a large number of goats be required to obtain a license from a responsible Government Officer on payment of five rupees, one of the necessary conditions being that the person should own sufficient grazing land and trees for the use of his flock.

T. NARASINGA RAO,
Convener.